

hardware review

Perlisten S7t: reflection free glory

Monday, June 19, 2023 Jason Kennedy



Perlisten S7t loudspeaker

To paraphrase the Rolling Stones, we can't always get what we want, and I wanted to hear the Perlisten S7t a long time before these substantial loudspeakers arrived at the listening room. But it was worth the wait. There was a lot of noise around Perlisten on launch because the range arrived apparently fully formed with tech that appeared to be totally new. Perlisten was started by professionals who not only know how to get a serious brand onto the market quickly but also took a rather different approach to design. The result is arguably the best value high end loudspeaker range to hit the market in recent times.

Perlisten was started by Dan Roemer and a team including Lars Johansen in 2016. Both men have track records in the audio business. Dan worked with Acoustic Research, NHT and Advent among others while Lars' background includes JBL, Harman and Jamo. It would appear that Dan is the engineer and Lars the businessman – roles that are hard for an individual to combine effectively, hence the delegation of skills that you will find behind all of the best established companies in this industry.

Perlisten established its identity with the introduction of THX Certified Dominus loudspeakers, which is the benchmark for high end home cinema sound systems. Among other things, it requires products to be capable of very high volume levels without colouration. To the two channel enthusiast, this seems excessive, yet it has resulted in the development of technology that benefits those of us who enjoy music and are not trying to recreate Ted Nugent style volume levels.

The Perlisten S7t is not a new model but is the flagship, notwithstanding the recent introduction of a limited edition version of fifty pairs. It's quite a magnificent beast in the tall, dark and handsome school, with four woofers flanking the distinctive moulded mid/treble baffle that Perlisten calls a 'DPC-Array'.

This Directivity Pattern Control Array combines a waveguide with a three-speaker, beamforming array, comprising a 28mm beryllium tweeter between two thin-ply carbon midrange domes of similar size. The configuration is designed, says the manual, so that the

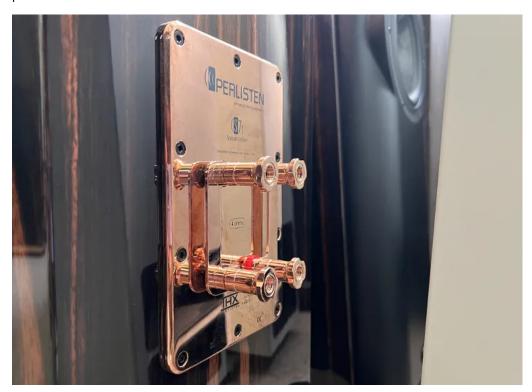
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drivers work in unison from 1.3kHz to about 3kHz, offering three times the sensitivity, power handling and excursion, and a third of the distortion within this limited band. After 3kHz the tweeter at the centre of the waveguide handles all frequencies up to 20kHz and beyond. Within this tweeter range, directivity is controlled solely by the waveguide, but between 1-3kHz, all three drivers control the vertical directivity to +/-25 degrees using passive beamforming, which operates via an ingenious physical offset between central tweeter and midranges to reduce early floor and ceiling reflections. The other DPC benefit is extremely low moving mass



compared to a typical midrange cone driver in a traditional design. In my experience this results in a distinctive and rather appealing sound.

The mid and bass drivers have Textreme TPCD reinforced carbon fibre cones with the so-called 'spread-tow' construction giving their chequerboard appearance. The cabinet meanwhile is less radical but very substantial, with each S7t weighing close to 56kg on its steel plinth – a part that incorporates outriggers for the rather nicely designed feet, and bolts onto the bottom of the box. The S7t has two reflex ports that fire downwards and vent via perforated covers to the sides and rear of the cabinet, however these are so well integrated that you barely notice their presence.







Connecting with the S7t

Connection is via rather beautiful copper terminals with two pairs provided for bi-wiring. I single wired across them with positive to the mid/hf and negative on the bass pair. Perlisten recommends amplifiers capable of at least 100W, so Ian Severs from Karma AV brought a pair of Class D Primare power amps to try. As it turned out he was happy with what he heard from my 150W Moor Amps Angel 6, and that's what was used. It proved a very fruitful pairing: the S7t is an extremely revealing loudspeaker with a rather different style of presentation. Specifically, the balance is much calmer and smoother than usual. It's on the dark side by the standards of many high end speakers yet the level of detail resolution is extremely high, which means that you can hear so much of what's going on in familiar recordings that you don't want to stop.

The S7t's DPC-Array controls the crucial mids and highs extremely well and delivers them in such a clean, uncoloured fashion that replay levels can be pushed as high as you like, and they won't 'shout' or sound like they're under stress. I guess if you are complying with specs that require very high playback levels, the loudspeaker needs to be able to deliver a lot of energy without complaint. What this means for the music enthusiast is an extremely articulate bass, keeping all the harmonics intact on Laura Marling's Soothing, and a very natural yet highly detailed vocal on Joseph Malik's Tavistock – a track that turned out to have more depth than expected on the S7ts. It also means seemingly limitless headroom. There is no sense of the speaker hardening up or compressing with level, at least not at the levels I prefer. There is no sense of strain whether you play heavy dub or high energy brass and normally it's the latter that causes problems.

You might assume that this is achieved by reducing midrange output relative to bass and treble, but this is not the case; it's down to the nature of the DPC-Array's ability to focus the sound horizontally, reducing reflections from above and below. I have a carpeted floor to reduce the impact of one surface, but the ceiling is regular plasterboard (dry lining), which is clearly quite good at bouncing back mids and highs from most loudspeakers. It doesn't get to join in to the same extent with the Perlisten S7t. You do sometimes see diffusive or diffractive ceiling panels in some dedicated rooms to counter this but it's not something most of us can accommodate, so the Perlisten approach is a clever way of combatting the issue.

I really enjoyed the way that the S7t opened up so many nooks and crannies in favourite tracks. It drills down through the layers of a recording and exposes precisely what went into its creation whilst retaining cohesion and control. The S7ts are very good at relating phase effects which brings out the dimensionality of carefully honed studio productions and adds another facet to the musical experience. They can also make otherwise uninspiring tracks sound rather more interesting than had previously seemed the case. This alone is as good a reason to invest in serious audio equipment as any. In an age when a Bluetooth speaker is enough for many

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music lovers, high end audio needs to make a very strong case for itself, and making music more engaging and accessible is surely that.

This speaker does seriously deep bass and keeps it as clean as the rest of the bandwidth. The box may not look as exotic as some in the high end, but it has been designed in such a way as not to colour the sound or join in with the lowest frequencies. The result is speed and texture in the low end that makes it as compelling as the midrange. London Grammar's Hey Now has all the power you could want in the bass while Leftfield's Inspection Check One has



rarely inspired so much leaping about. Bass with this degree of speed and extension is a rare treat and sitting through it is really not an option.

The dispersion characteristic does nothing to undermine imaging; if anything, it improves depth and focus by removing the reflections. This was apparent on a variety of pieces not least Lou Reed's quietly spoken Vanishing Act, a track often undermined by poor control of voice, yet here you get the full pathos of the performance and a striking sense of the musician in a clearly defined acoustic. I really enjoyed the degree of transparency offered by the S7t, it revels in decent recordings, bringing out tone and texture alongside precise tempo, and ultimately, the feeling in the music. The fact that it does all this in such a clean, relaxed fashion is really appealing too. I could very easily live with the sound of the Perlistens.

Perlisten S7t verdict

This substantial loudspeaker is exceptionally good in all the ways that matter. I suspect that it would hold its own against alternatives approaching twice the price. By combining far eastern manufacture with cutting edge design, Perlisten have delivered a loudspeaker that stands out for its remarkable sound quality and value. It's not inexpensive but there are plenty of high end speakers that cost more but will be found wanting by comparison. Apparently, you can use them for your movies too!

