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Perlisten Audio S5M: audiophile high-level speaker with highest THX certification



The S5M from Perlisten Audio is not only an unusually rousing hi-fi speaker. The compact Dane is also perfect for film sound. A very rare combination (Photo: Perlisten)

An old truism says: "HiFi speakers are not made for home theater - they lack dynamics." Another says, "Film sound speakers are not made for audiophile music reproduction - they lack musicality and resolution." A dilemma for all those who want to enjoy music and film with just one system. And this is where the still young company Perlisten Audio comes in. It promises the highest naturalness, but also so much level and dynamics that even THX was impressed and awarded the highest THX certificate Dominus here for the first time. Has someone found the missing link? The test of the Perlisten Audio S5M contains a clear answer.

https://www.lowbeats.de/perlisten-audio-s5m-audiophile-hochpegelbox-mit-hoechster-thx-zertifizierung/



One of the two Perlisten makers is Lars Johansen. He presented the current Perlisten program at the HIGH END 2022 (Photo: H. Biermann).

The founding of Perlisten Audio dates back to 2016, but we should not be mislead by that. The two creators, Daniel Roemer and Lars Johansen, are both old hands and have been in the audio business for decades. Roemer for loudspeaker giants like NHT and Acoustic Research (the company that once invented the closed box). And Johansen for the top dogs JBL, Harman Kardon, Klipsch and Jamo. Anything but "walk-ins," the legendary German goalkeeper Olli Kahn would say. His last salaried years, Johansen was president of Miller & Kreisel, one of the most ambitious studio and multichannel suppliers worldwide. We'll get to that later.

Currently, the American company with clearly Scandinavian roots has eleven loudspeakers (all passive) and four active subwoofers in its lineup. The Perlisten Audio S5M tested here comes from the higher S line and is a still compact loudspeaker with just under 40 liters of volume, for which a fancy stand is available. And since Perlisten so clearly emphasizes bridging the gap between high end and surround, the S5M was the obvious choice for our test. The digital flipbook shows the versatile speaker from all sides:









hotoS: Perlist



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The special features of the Perlisten Audio S5M

The first thing that stands out is the weight: when you pull the compact Perlisten out of its packaging, you realize that at 19 kilos (42 lbs), it is by no means one of the lightweights in its class. So there seems to be quite a lot in it. Then there's the design of the front: Like the entire S5M, it's made of MDF, and slightly curved and milled wooden rings accommodate the woofers as well as the tweeter array. The Perlisten developers want to nip as many reflections of the baffle in the bud from the outset. That's good. Of course, the fingers balk at writing "compact" with a height of 60 centimeters. But the S5M is not a floorstanding speaker either.

That the S5M eludes many common patterns, one notices already if one wants to classify it as a 2- or 3-way construction. It is not, because it is a symmetrically constructed 2-way speaker with a downward extended high frequency range. Two bass-midrange drivers in 18-centimeter format sit at the top and bottom of the baffle. That's still pretty classic - even if the two woofers are pleasingly efficient and level stable thanks to lightweight carbon fiber-textreme composite cones, lightweight aluminum voice coils and huge magnets.



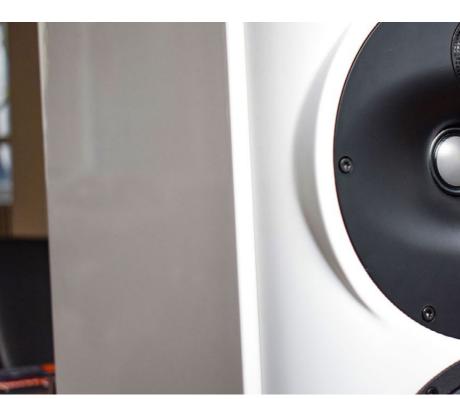
The cone of the bass-midrange drivers is made of carbon fiber-textreme composite material and is enormously tear-resistant.

The highlight of the S5M, however, is the tweeter array. In the center sits the actual tweeter, a 28 mm beryllium dome with a wide bandwidth. This tweeter is flanked by two fabric domes of the same size, which sit in the array above and below the beryllium tweeter. These cover the frequency range of about 800 - 4,000 Hertz. In this range, all three tweeters run in parallel.

What is this good for? Running a classic tweeter up to 1,000 hertz is a risky venture, because tweeters are generally not made for that. The Perlisten array, however, not only provides the central tweeter with the sound pressure amplifying horn - in the distortion-prone range around 1,000 hertz, the two connected tweeters triple the moving surface and thus increase the power handling by quite a bit.



The tweeters differ mainly in the material of the domes. The picture illustrates once again that the actual tweeter is mounted slightly recessed.



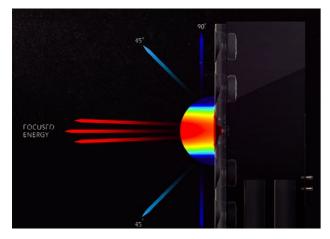
The tweeter array of the Perlisten Audio S5M is a true work of art. The beryllium dome tweeter in the center is supported by a horn-like waveguide. The supporting tweeters physically sit further forward.

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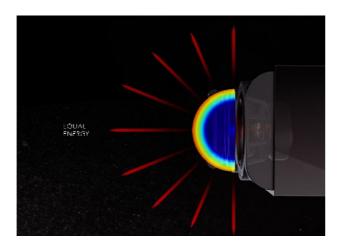
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The idealized simulation shows the effect of such an array: The radiation upwards and downwards is restricted...

The second point Daniel Roemer and Lars Johansen aim for is a controlled-directional dispersion. Because they have identified floor and ceiling reflections as particularly damaging to sound, they significantly reduce the radiation upwards and downwards in the range above 1,000 hertz. This is done by cancelling out this high-frequency array. The simulations show how the radiation of the S5M should ideally run: quite narrow in the vertical, wide in the horizontal.



...while it is quite wide to the side (simulation: Perlisten)

The sound bundling not only suppresses ceiling and floor reflections, the Perlisten Audio S5M also "carries" the sound further than classic hi-fi speakers. This point is extremely helpful, especially in larger rooms. I have also tried the S5M in the large LowBeats listening room, where the distance speaker-listener can be as much as 5 meters. Especially there, the focused compact speaker works dazzlingly and brings the full sound energy to the listener, especially in the mids.

Perfect phasing

We already know the combination of several tweeters from Geithain or Miller & Kreisel. There, too, the tweeters are connected in a similar way as in the S5M. And yet I imagine that this is not done to the same perfection. Obviously, the gentlemen Roemer and Johansen manage to conjure a high phase stability from the combination of the tweeters (also offset in depth) plus a very elaborate crossover (which is distributed on both side panels of the S5M).

In any case, the imaging of the compact Perlisten is phenomenally good. But even more impressive is their extreme precision of reproduction. Everything sounds as if drawn with a very fine pencil; there is no fraying at the edges with the Dane. I haven't heard that so well with passive loudspeakers so often ...

AND SECURE AND SECURE

One of the two crossover boards. The second one is not smaller ... (Photo: Perlisten)



The crossover is in two parts and is located on the left and right side of the tweeter array (Photo: H. Biermann)

Practice

There is a really fancy stand for the still compact S5M (see above), but as a potential film sound speaker it is also intended for placement close to the wall. For this case, you can unscrew the bottom plate and close the bass reflex tube with a foam plug that is included. But this was also the better option for operation in the small LowBeats listening room.

This detail shows that the Perlisten Audio S5M is no ordinary HiFi speaker: it is THX Dominius certified. The Dominus standard promises sufficient level reserves for rooms up to 184 cubic meters. If we assume the usual room height of 2.4 meters, that would be 76 square meters. Moreover, it has to be said that THX always measures very conservatively with a lot of safety reserves. So the S5M is really suitable for larger rooms.

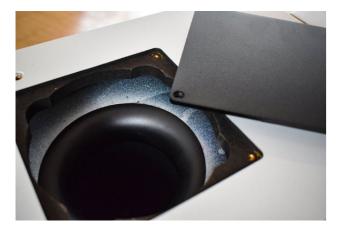
To get the THX seal of approval, level stability counts first and foremost. And already at this point one has to pay highest respect to the Perlisten developers: The LowBeats level measurements came to 117 decibels in the dynamic range. For a 2-way system that does not use horns in the high frequency range, this is probably a record.



The THX Dominus certificate is part of the essence of the Perlisten Audio S5M. It is engraved on the connector panel (Photo: Perlisten)

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If you unscrew the massive bottom plate, a lush bass reflex tube is revealed ...

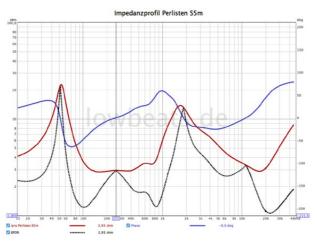


... which you can close completely with the foam



These grilles are attached to the sides of the Perlisten Audio S5M. Through them the bass energy of the bass reflex tube escapes

Should one drive such an efficient and level stable speaker with low wattage amplifiers like single ended tubes? Absolutely not. The LowBeats impedance measurement still looks quite tolerable. But the EPDR value, which is the result of impedance and phase (blue curve) and shows how much the power supply of the connected amplifier is actually loaded, slips far below 1 Ohm in three places. Only really stable amplifiers can cope with this. And indeed, we achieved the best results in the listening test with the ore stable Neukomm CPA 155S, the Atoll In400 ES or the SPL power amplifier \$1200. Even with our tube reference, the Westend Audio Monaco, it sounded quite excellent. However, the Monaco is also not a classic, rather soft-sounding tube amp, but one that was bred by its creator, Günther Mania, for a lot of drive and control.

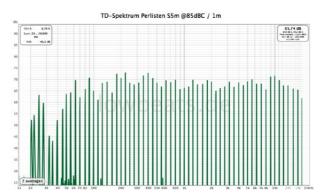


The impedance (red curve) runs on still stable value. But the EPDR value, which is the result of impedance and phase (blue curve), slips far below 1 Ohm in three places and stresses the power supply of the connected amplifier (measurement: J. Schröder).

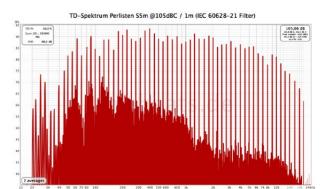


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In the usual 85 decibel living room level measurement, the S5M shows no distortion at all. An ideal behavior (measurement: J. Schröder)



The S5M manages a continuous level of 105 dB. If you add the usual dynamic headroom, you get 117 decibels. By the way, this is the same value that Perlisten Audio states for the S5M. No wonder: there is no cheating with THX (Measurement: J. Schröder)

Technical data



Perlisten S5M	All technical data
Technical concept:	passive 2,5 way compact speaker, bass reflex cabinet
Assembly:	2 x 18 cm bass, DPC array with 3 x 28 mm tweeters
Maximum level:	117 decibels
Max. rec. Room size:	75 square meters
Min. rec. Amplifier power:	2 x 50 watts (4 ohms), extra stable amp
Special features	THX Dominus Certification
Dimensions (W x H x D):	60,0 x 24,0 x 40,0 cm
Weight:	19 kilo

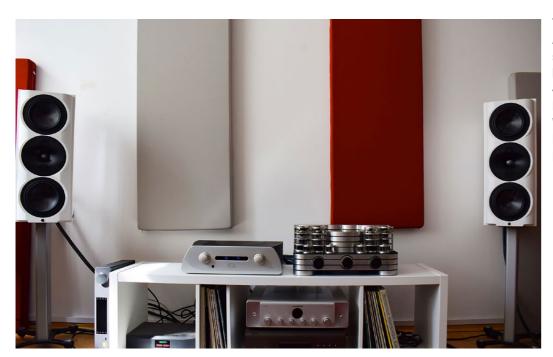
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Holger Biermann

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Listening test



The Perlisten
Audio S5M in the
small LowBeats
listening room
– here with Atoll
IN 400 ES and
Westend Audio
Monaco (Photo:
H. Biermann)

First, we had the S5M in a small listening room, where the compact Dane performed like an ultra-precise monitor. Everything was so crisp and precise that it was a sheer joy to listen to. An energy, an audibility that grabbed us and pulled us straight into the recordings. I like that kind of thing: when you have the feeling that you can hear everything from the recording and even the finest details are brought out with the utmost meticulousness. That's what the best studio monitors sound like. And that's also how life sounds. Anyone who has ever stood in a small jazz basement directly in front of the drums or the saxophone player will remember the enormous fine and coarse dynamics that make live music so stirring in close proximity.

This is exactly how the Perlisten sounded in our small listening room. Deep in the bass and yet wonderfully dry, it differentiated the individual voices of the Deep Throast Choir with such bre-

athtaking precision, it made the voices seem so three-dimensional that it brought us very close to the action. Not only was the resolution of the (often difficult) S sounds fantastic: above all, the energy, shimmering transparency and seemingly effortless dynamics with which she shook the louder passages out of the drivers were remarkable. There comes a point when I put on "Crying" by James Blood Ulmer (Live At Bayerischer Hof, Munich). I was at the concert and know the acoustics there guite well. You can drive the perlists so loud that you can easily get close to the original level of the concert. Those wonderful dry-deep bass drum hits. the hammering snare and then the very unique voice of James Blood Ulmer: I can't say it any other way - that sounded really real!

At least to my ears. Colleague Andreas Günther, who was involved in several of the listening tests, would have liked a bit more musical

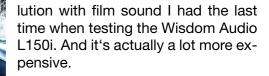
warmth. You won't get that from this transducer in the quasi-near field. So we packed up the two S5Ms and moved them into the large listening room - and thus into a completely different environment. Here, too, the two S5Ms stood directly in front of the wall, but the listening distance doubled to almost five meters. And see: The character of the Dane was still clearly audible, but some mid-

range/high-frequency energy was lost over the longer distance. The sound of the S5M became a bit tamer and now colleague Günther was also satisfied.

Then we switched to film sound and watched the movie MEG. The remake of "Jaws" is moderately well done, but the sound effects are great. As for the sound of the perlists, all I can say is SPECTACULAR. When the giant shark from prehistoric times bites into Statham's mini-submarine, it seems depressingly real. Most importantly, the Perlisten pushes considerably more of that sub bass (which punctuates the underwater situation) than you'd give the narrow speaker credit for.

I've really heard quite a few potent home theater systems. But this fine dynamics and reso-

MEG: US-American blockbuster with great sound effects (cover: Amazon)



The whole thing became really impressive when I placed our compact speaker reference, the Dynaudio He-

ritage Special, next to it and played sequences from MEG again. This hair-raising, sparkling energy of the film sound was hardly present with it. The Dynaudio is unquestionably one of the best compact speakers I know. But for long listening distances it is (like most transducers of its class) simply not made; over the distance it loses a large part of the dynamics. The S5M, with its focused dispersion, does that much better. And aside from that, the Perlisten is many times more level.

Unfortunately, we only had a pair of S5Ms in the listening room. It's hard to imagine the hell you can unleash with five or seven of these transducers (and corresponding subwoofers). That's surround at its best. We will definitely test such a combination. And I'm already looking forward to it...



I can't remember a time when I listened to a loudspeaker of this size so wonderfully loud - and couldn't get enough. And I also can't remember ever having heard or "experienced" spectacular film sound with so much pleasure from a hi-fi speaker. The gentlemen Roemer

and Johansen have not exaggerated: The S5M is the perfect speaker for both worlds. It is by no means cheap, but it is the almost perfect solution for those who want to experience every kind of audio optimally with just one system.

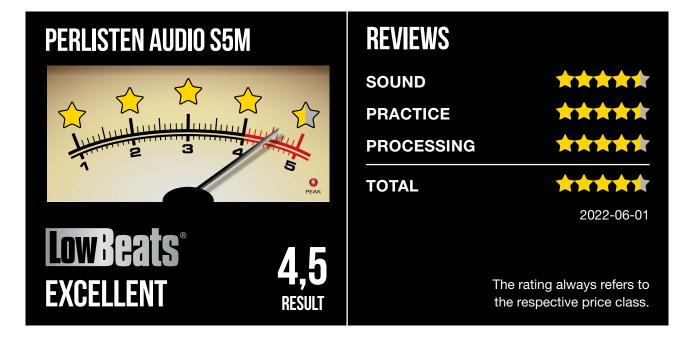
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Pro & Contra:

- Highly agile, very precise and open sound
- Very high maximum level
- Tonally suitable for HiFi as well as film reproduction
- Requires stable power amplifiers

Price per pair:

(Manufacturer recommendation)
Perlisten Audio <u>\$5M:</u>

13.000 Euro

Distribution:

Audio Reference GmbH · Alsterkrugchaussee 435 · 22335 Hamburg · www.audio-reference.de

Fellow player:

Test tube integrated amplifier Westend Audio Monaco

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Lowbeats-Author: Holger Biermann

Editor-in-chief with a penchant for the finest loudspeaker and amplifier technology, good wine and travel: he also writes most of the trade show and dealer reports.