



German Physiks HRS-130

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There is nothing quite like a German Physiks loudspeaker either in or beyond the audio world, the DDD driver with its omnidirectional dispersion remains distinctive and radical decades after its introduction. The first example of the Dicks dipole driver (DDD) was produced by German Physiks in 1992 but the development of this driver design dates back to the 1960s when it was first introduced by American engineer/inventor Lincoln Walsh, in the next decade Peter Dicks developed his own prototypes using different cone materials and hoped to get an audio company involved in manufacturing it. But it took a while before German Physiks founder Holger Mueller got involved in the early 90s and licensed the technology that has sustained his company ever since.

While this driver may look like a slightly elongated version of a regular cone that fires downwards rather than forwards, it uses bending waves in the cone material to produce midrange and modal waves to create high frequencies as well as the piston motion common to all cones which delivers the low end. There is no separate tweeter on the HRS-130 yet it can produce frequencies from 220Hz up to 24kHz, which must make it one of, if not the widest range drivers on the planet. Which gives it an advantage over multi driver designs that have a crossover network to divide the incoming signal up, this not only leaves its own signature on the sound but the fact that the signal handled by a cone overlaps with that produced by a dome brings its own problems too. Which makes a wide range driver very appealing on paper but hard to achieve with piston cones which have much narrower bandwidths than that claimed for the DDD. The German Physiks cone itself is made of coated carbon fibre and has a moving mass of only 3.5 grams (1/8 ounce).

The HRS-130 is a reasonably substantial tower of a speaker that stands just over four feet high (1.26m) and weighs a respectable amount yet it's only the second model up in the company's range, all of which are based around the same driver technology. Bass is produced by a 10inch woofer mounted at the bottom of the cabinet and firing out via the openings around the plinth, the bass system is therefore infinite baffle, it's sealed and doesn't have a reflex port. Which was presumably necessary in order for it to stand a chance of keeping up with the DDD that has no cabinet volume and operates in free air. As a whole the HRS-130 has a sensitivity of 86.9dB at 4 Ohms which suggests it's not the easiest of loads, as does the minimum amplification requirement of 70W/4 Ohm.

Four WBT bi-wire terminals sit on a stainless plate near the bottom of the cabinet and have a high frequency level adjustment feature above them, this allows you to set high frequency output at -2dB, flat, +2dB and +4dB. As the output radiates in all directions you can't use toe-in to adjust the balance as you can with regular loudspeakers so this is a useful feature and should help compensate for different room characteristics. I hooked the HRS-130 up to an ATC P2 power amp with Townshend Fractal F1 cable and placed the speakers 35cm from the back wall.



Sound quality

The first thing that hits you is how incredibly open this speaker makes everything sound, and conversely how shut-in most speakers seem after them, that all round radiation is very effective in this regard. It also means that the sound is spread around the room in a very even fashion, there is no drop in output wherever you are which means more people can enjoy the sound. Inevitably it doesn't change the proximity factor though, the closer you are to one channel the louder it is. What it does change is the nature of imaging which is less etched than usual but varies in scale to a greater degree, you don't get such a holographic vocal as say other speakers in the price range but there is no shortage of detail defining that vocal, all the nuances of phrasing and tonal character are there to be enjoyed but they aren't projected in the same way. However, this doesn't stop it producing stereo solidity as you'll read below.

What this speaker does really well is resolution of detail, it offers a degree of insight into recordings that is rare even at this price and that makes for some pretty intense and enjoyable listening. Gwenifer Raymond's latest finger picking masterpiece Eulogy for a dead French composer is awash with harmonics and the playing seems impossible for two hands on one guitar but it's lovely to revel in the timbre of that guitar and the way she plays it with so much



controlled energy. On Gregory Porter's 1960 *What you can hear the room* that the voice was recorded in as plain as day, there's a degree of definition to the reverb that you just don't get with most speakers. The balance can sometimes seem to be a little on the bright side but ultimately it's just damn revealing and you need a really clean system if you want to play at high levels.

The bass is surprisingly well extended with some tracks really energising the air in the room. It's controlled and powerful and equally revealing in its own way, there is no thickness but plenty of extension. Patricia Barber's *Post Modern Blues* is a very good recording and these speakers let you know all about it, her voice is superb and you can hear every breath she takes alongside the nature of the booth it was captured in. Even the double bass solo is engaging and that doesn't happen very often. This speaker is unusually good at what some term micro dynamics, that is the volume level of every note being played, this is something that many speakers fail to convey but here there is so much clarity and definition that this sort of nuance is very clear. You can also hear the amplifier warming up to a far greater degree than normal and if you change anything in the system it's not hard to discern how it affects the end result. For instance, I was reviewing some fancy cables but took out the speaker cable before the interconnect and discovered that this threw the tonal balance out quite obviously and to a greater extent than when I did the reverse with a different loudspeaker.



I tried a different amplifier in the Canor AI 1.20, a Class A integrated with a lower output (50W/4 Ohms) than German Physiks recommends but which nonetheless made some beautiful music in their company. Lana del Rey's voice and piano had so much body, and the room in which the latter was recorded was once again superbly defined. The rumbling bass on the chorus of *NFR!* was sumptuous, dark and chewy just the way it should be. *Cumberland Blues* from the Grateful Dead's *Europe '72* had a hear into it quality that brought out the scale of the venue but this pairing didn't disguise the slightly coarse nature of the recording; genuine transparency reveals everything after all.

Using a Rega P10/Aphelion 2 turntable/cartridge to play vinyl through the HRS-130 was very thrilling, producing a greater sense of solidity in the high frequencies particularly with the drum kit on Matthew Halsall's *When the World was One*. Then the trumpet comes in and floats above the system in uncanny 3D stereo, it's so real that it makes most speakers seem flat and restrained. With the more powerful ATC P2 power amp and matching CA2 preamp to

provide some more gain I hooked up these speakers with Corium interconnects and speaker cables from LA Sound, this set up took the biscuit for transparency to detail, revelling in the dynamics of John Fahey's *Let Go* and delivering seriously deep bass with Nils Frahm's *Improvisation for Coughs and Cell phone*. The track that followed on the *Spaces* album, *Hammers*, was absolutely sublime. Later in the evening things got a bit more lively with the Smashing Pumpkins' *Siamese Dream* and the track *Soma* which rambles for a while but when the solo comes in it's absolutely blinding with this degree of resolution and lack of distortion. The distortion of an electric guitar can be improved just as much by a very low distortion loud-speaker as a violin, it works with everything, less distortion is more original sound.

I had a great time with these speakers, they are expensive and require high quality source and powerful amplification in current if not wattage terms, but their resolving powers are quite spectacular. It's not hard to see why the DDD has sustained German Physiks for so long.

