

# Omni Present

**Clever production engineering changes mean that German Physiks now have a sub £8,000 loudspeaker in the UK, making them significantly more affordable to high end buyers. David Price tries the Limited 11...**

**A** couple of years back I tried an unusual new omnidirectional from German Physiks, in the shape of the HRS120. I really liked it, but two things ultimately limited my enthusiasm. First, a trivial point admittedly, was the finely hewn but unflattering wood finish. Second was the price; at £16,000 I feared it would be off the radar of most high end speaker buyers in this country. Now though, here we are with a slightly downsized speaker that's £8,000 less. That's a big chunk of change for something that I was to find gave about ninety percent of the performance for about fifty percent of the price.

So the new Limited 11 is not your average common-or-garden box speaker. It's an omnidirectional with a very clever midrange and treble driver (more of which later). Omnis don't generally come cheap; the iconic one for me is the £50,000 MBL Radialstrahler; it's not the sort of thing you'll find in the sale section of the Superfi website! The object for German Physiks was to make their omni design as cheap as they could; to wit it is (currently) direct sale-only from Germany, and has a rather industrial 'acoustic linoleum' finish.

Personally, I did not take to this, but there are many listening rooms in which it would suit perfectly. And a little bird tells me at some stage other finishes will be available, including white, which would look stunning and flatter these loudspeakers' distinct looks in a way which wood or grey lino doesn't. The basic profile of the speakers is quite arresting but attractive in a

'high tech' sort of way, and the quality of finish is excellent; there's no denying they're an impressive sight in a slightly retro, 'space age' sort of way. If you want the light grey finish at £7,800 you'll have to hurry as only one hundred pairs are being made before dark grey and white finishes join the colour palette and the price goes up to £9,999.

The Limited 11 uses a single carbon fibre Dicks Dipole Driver (DDD) and a downward firing 200mm woofer. The 1,050x240x240mm cabinet sports no logos and the normally shiny surface of the DDD diaphragm has been given a matt finish. The HRS120 was a good deal bigger at 1145x320x320mm, but I don't think the Limited 11 looks any the worse for it. Titanium finish loudspeaker terminals are fitted, which match the overall colour scheme, which interestingly cost more than the standard gold type fitted to the more expensive speakers. Total weight is 28.9kg apiece.

The DDD is of course the 'standout' feature of all German Physiks speakers, and is described by the company as a "bending wave convertor". Amazingly, it's a full range device, claimed to run from 200 to 24,000Hz, which of course obviates the need for a crossover, especially in the midband which is precisely where you *don't* want it. Remember that conventional



loudspeakers crossing over cause all kinds of nasties, from peaky response to phase errors; it's the sonic equivalent of letting people park on roundabouts; just about

the worse thing you could do to your road system!

Then of course there's the omni directional dispersion pattern, which can only be a good thing; done properly a full range omni answers a vast range of questions asked by multiple moving coil cone drivers, and also electrostatics too. Overall, the company claims a frequency response of 32-24,000Hz [see MEASURED PERFORMANCE].

It's named after its 'father', Peter Dicks, who created his first design concept in 1978. It was Mainhattan Acustik, run by IT expert Holger Mueller, who licensed the design in the early nineties, which duly led to the birth of the German Physiks company. The driver has since been refined many times, and partnered to a down-firing bass driver (a 200mm diameter unit) in the same cabinet; this forms the blueprint for all the company's speakers. The cabinets have extensive Hawaphon and felt damping materials applied inside and are constructed from heavy panels of MDF, with internal reinforcements fitted at critical points. Minimum life expectancy is said to be twenty five years, with corrosion resistant V4 grade stainless steel for the DDD driver support pillars, terminal mounting plates and all the screws; a five year warranty is offered.

### SOUND QUALITY

As with all speakers that land in my listening room, I manoeuvred the Limited IIs into a place that I 'guesstimated' would be best. Not as with all speakers however, right from the second the volume was switched on, the German Physiks omnis sounded at home. It was at this point that I congratulated myself on my brilliant choice of positions for them, but the company's representative Robert Kelly dryly pointed

out that they work well pretty much anywhere in a room, anyway. Hmmm! Anyway, I did do a bit of minor remodelling, but soon I'd got them singing, about 3m from each other and about 50cm from the back of my long rear wall. The thing to bear in mind here is that they can deceive you into thinking you've got 'em working perfectly, so amenable they are to rooms, compared to certain other high end speakers which are horridly fussy; don't give up after your first reposition, they do reward careful placement even though they flatter bad rooms and positions.

Not having heard another German Physiks loudspeaker since the HRS120 was cruelly snatched from my listening room a couple of years ago, it was fascinating to suddenly 'snap back' to their distinctive sound. I don't mean distinctive as in coloured; indeed it's quite the opposite. Here you hear a loudspeaker with so little apparently going on, save a few bass issues right at the bottom end. This latter point is as much about speaker/room interaction and setup, as it is about the speaker itself, incidentally. Imagine if you would, a clean sweep from 200Hz upwards; as the frequency rises, the speaker continues to sound the same. There are no 'hot spots', no periods of strange vibrations or any other type of misbehaviour; instead things just sound uniform and even and true. That, in a nutshell is what you get from the Limited IIs.

The recent Heathrow hi-fi show saw Noel and I answering questions from an audience, and one which stuck in my mind was that of how can we (i.e. reviewers) make our mind up about the sound of a speaker without listening to 'real' (i.e. acoustic, orchestral) music? Well, dropping the stylus on the A side of Kraftwerk's 'Computerwelt' reminded me that electronic music, which of course has no natural acoustic signature, can be just as honest a test of a transducer. The Limited IIs immediately sounded dextrous, subtle and detailed; the bassline was bouncy yet tight; midband was breathtakingly expansive yet precise and treble was crisp and sonorous. This track's metronomic beat showed the fleet footedness of the DDD driver; it can stop and start with agility, giving very little 'hangover' from the last excursion it's asked to make. It's not quite up there with electrostatics or ribbons, but not far off and certainly sounds far closer to these than ye olde moving coil driver. The result is a





suppleness and fluidity across the mid which is lovely, allied to a delicacy coming from the (obviously very light) carbon fibre structure.

In tandem with this is a bass response that's very coherent, following the events further up the frequency range with alacrity. There's less of a sense of two drive units than with a mid-price Martin Logan, for example; things integrate well. The lovely bass synth cadences of 'Computerwelt' came through very nicely timed; indeed in my room they worked better than the larger HRS120, which as I alluded to earlier tended to 'over drive' the room a tad. The Limited 11 sounds tighter and drier than its bigger brother then, which suits the main DDD driver a treat, as this is precisely what it is. On paper, it goes down a few Hertz less, but I can't say it's noticeable, even on the subsonics imprinted into the groove of 'Computerwelt'. The baby GP speakers sounded crisp and firm and all of a piece with events further up top.

Moving to Herbie Hancock's 'The Prisoner', a lovely piece of late sixties acoustic jazz, and these speakers showed themselves to have tonal purity that's unexpected even in products of this price. B&W802s, for example, are many fine things but when I listen I still hear their Kevlar cones across the upper mid; by contrast the Limited 11s seemed to have less in the way of innate 'tone' with piano and double bass. There was a satisfyingly sense of 'being there' to the performance. I wouldn't claim that they're as transparent as a Martin Logan panel in this respect, but again they came close without the attendant mid/bass integration issues. Better still, this superb Blue Note recording came over with cavernous size; maybe not the Grand Canyon, but the GPs certainly did a passable impersonation of the Avon Gorge. Once you've got them close enough in the room, or turned the volume up sufficiently, instruments lock into place in the soundstage and you're there. It's the ease of soundstaging and general effortlessness which impresses; funnily enough though you get used to it and it's only when you go back

to conventional speakers that the imaging and phase sounds so out of sorts.

Acoustic Triangle's 'Placet Futile', startlingly well recorded on SACD, showcased the tonal purity and unbridled evenness of these loudspeakers. The Limited 11s thrived, with sparkling harmonics from the piano, a wonderfully tangible clarinet and a profound sense of air and space. They let the recording's flavour pour out into my listening room, as if the studio barrier had been breached and the music was overflowing. The location of the respective instruments, and indeed the microphones capturing them, was laid before me with forensic accuracy. The overall effect was mesmerising, the only concession to it being a recording rather than a moody live jazz space was the bass. Yes, of course you can hear the two drive units gently brushing up alongside one another, but this is so deep down that it's no worry. In my listening room, there was no sense of lumpiness or boom, or blur or slur; only the slightest 'hint of box' was heard. This is nothing to be ashamed of, as I've never heard a box loudspeaker doesn't allude to the way it's constructed. The Rondo from Mozart's 'Wind Serenades' (Chamber Soloists of the Royal Philharmonic Orchestra) again proved the Limited 11's mettle; a deliciously accurate tone to brass and woodwind, plus acres of air and everything held in perfect proportion.

The only music type I tried which in any way raised questions with these speakers was rock; they actually sounded very pleasing replaying America's 'Ventura Highway', but they lacked the drama of my Yamaha NS1000Ms (which I am ashamed to say had been made to sound rather ordinary with jazz and classical). They may be £8,000 speakers but they lack the sheer physical presence of some rivals; Usher's £10,500 Be-10 have more heft, more punch, more power, more of a tiger in their tank. The German Physiks, by contrast,

sound more petite, precise and poised, but ultimately weaker and less impactful; at very high levels there's the sense that they don't quite have the sheer horse power. German Physiks would surely retort, 'so get the HRS120', but that's another £8,000 spongs you need to find!

**CONCLUSION**

In many ways I liked the German Physiks Limited 11 more than the larger and pricier HRS120 I reviewed way back when. As a package they're brilliant, giving 'essence of German Physiks' to a far wider market, and in some ways giving away little or no performance to boot. If you want a spacious, even, clean and precise sounding loudspeaker for a medium to large-ish room – and listen to most types of music – then they're truly first rate contenders. Only headbanging rock fiends wanting big bore bass will find them wanting. As such, I'd wholeheartedly recommend them – providing of course your decor suits the light grey lino; if not wait for the unlimited ones and get the white!

**REFERENCE SYSTEM:**  
 Marantz TT-1000 turntable  
 Icon Audio PS3 phono stage  
 NuForce P9 preamp  
 NuForce Ref. 9SE power  
 M. Fidelity AMS35i amp  
 Yamaha NS1000M speakers

**HI-FI WORLD**

**VERDICT** Expansive beyond almost all others in its class, this superb loudspeaker is for lovers of crisp, accurate, neutral and open sound.

**GERMAN PHYSIKS LIMITED 11** £7,800  
[www.german-physiks.com](http://www.german-physiks.com)

**FOR**  
 - sublime soundstaging  
 - speed, musicality, dynamics  
 - delicate tonality

**AGAINST**  
 - slightly limited bass  
 - grey finish!

**MEASURED PERFORMANCE**

Frequency response from an omnidirectional loudspeaker like this one looks far more ragged than a forward firing design, due to the amount of return energy from room surfaces, even with our gated, sine wave burst measurements designed to minimise this problem. However, fast 'chirp' tests and pink noise both showed the Limited 11 has a good pressure level balance in any direction, and our pink noise analysis, published here, clearly shows this. There are no significant tonal imbalances and even though subsonic output is limited by an internal series capacitor the Limited 11 still managed to energise our 28ft measuring room's mode at 24Hz, so it will have low bass.

Overall, the Limited 11 looks very balanced, but in truth there is much more treble energy being put into the room from an omnidirectional unit and this means that subjectively the balance will sound bright or light, due to reflected energy from walls, ceiling etc.

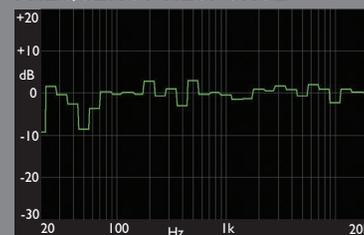
Sensitivity was on the low side at 83dB Sound Pressure Level from one nominal watt (2.8V) of input. A high impedance of 8 Ohms was one reason for this, although the bass unit is still 4 Ohms our impedance graph shows. Current draw at low frequencies will be very even as there are no bass peaks, so something different is happening here. Bass damping is good according

to the impedance and response plots, so the Limited 11 will likely have well controlled bass, but this is not a bass heavy design by any means; it will likely sound a little light low down.

Colouration was reasonably well controlled, but the cabinet looks a little lively at low frequencies.

The Limited 11 is obviously a well developed design likely to give a good sound. It will almost certainly have a light balance though. NK

**FREQUENCY RESPONSE**



Green - driver output  
 Red - port output

**IMPEDANCE**

