

Harbeth Audio P3ESR

This review first appeared in the November 2010 issue of hi-end hifi magazine High Fidelity of Poland. You can also read this review of the Harbeth P3ESR in its original Polish version. We publish its English translation in a mutual syndication arrangement with publisher Wojciech Pacula. As is customary for our own reviews, the writer's signature at review's end shows an e-mail address should you have questions or wish to send feedback. All images contained in this review are the property of High Fidelity or Harbeth - Ed.

Reviewer: Wojciech Pacuła

CD player: Ancient Audio Lektor Air

Phono preamp: RCM Audio Sensor Prelude IC

Cartridges: Air Tight Supreme, Miyajima Laboratory Waza

Preamp: Ayon Audio Polaris III with ReGenerator II power supply

Power amp: Tenor Audio 175S and Soullution 710

Integrated amp: Leben CS300XS custom

Loudspeakers: Harpia Acoustics Dobermann

Headphones: AKG K701, Ultrasone PROLine 2500, Beyerdynamic DT-990 Pro 600 Ω

Interconnects: CD-preamp Acrolink Mexcel 7N-DA6300, preamp-power amp Wireworld Platinum

Eclipse, speaker cable Tara Labs Omega Onyx

Power cords: Acrolink Mexcel 7N-PC9300 (all equipment)

Power conditioning: Gigawatt PF-2 Filtering Power Strip

audio stand: Base under all components, Pro Audio Bono under CD

Resonance control: Finite Elemente Ceraball under the CD, turntables change continuously

Review component retail: 5.900zł/pr in Poland

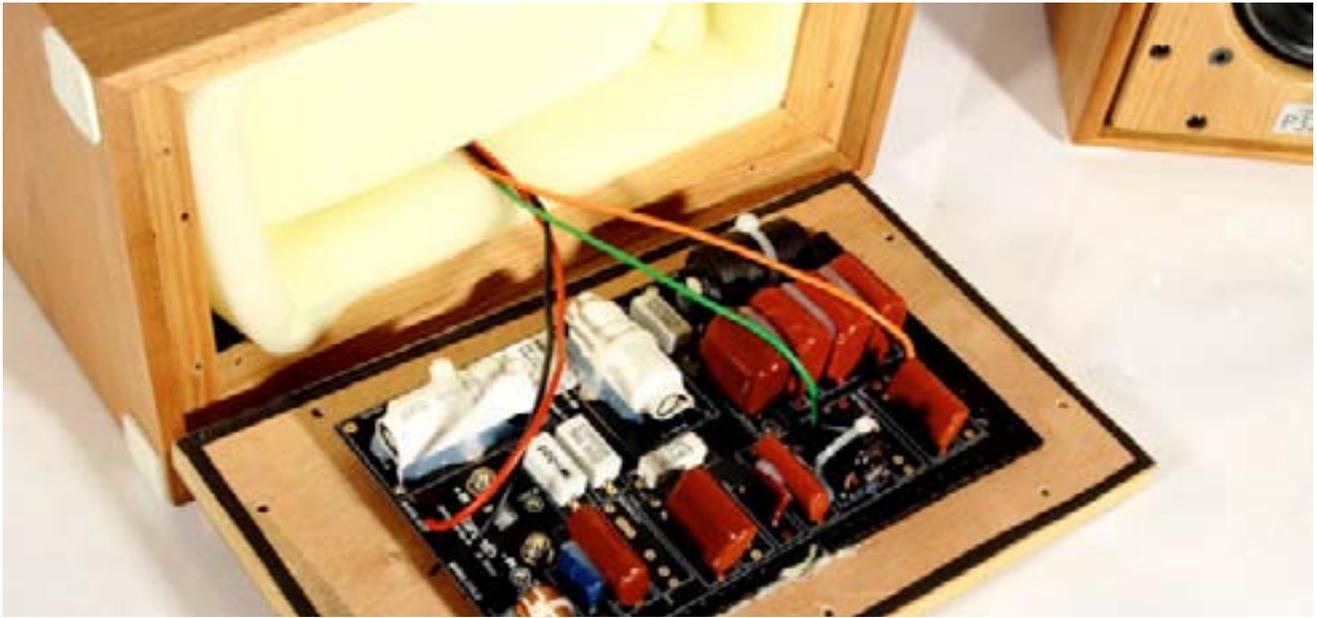


Alan W. Shaw designed the original HL-P3 loudspeaker to replace the LS3/5A built upon the BBC's license. History here is rich and surprising and you can learn about it in the review of that speaker's anniversary edition here. You should also read John Atkinson's more complete compendium of specialized knowledge on this speaker here. Additional information can be found in one of the basic audio bibles, Sound Bites. 50 Years of Hi-Fi News by Ken Kessler and Steve Harris in the chapter The BBC influence [IPC Media, London 2005, s.116.]. Here and now all that remains to reiterate is that the P3ESR is a two-way bookshelf speaker whose predecessor was designed for the BBC studios as a nearfield monitor.



This is a tiny sealed cabinet made from MDF. The Norwegian SEAS tweeter incorporates modifications specified by Alan Shaw, owner and boss of Harbeth, while the mid/woofer is the company's own. Its diaphragm is made from a material called Radial and now in the latest version with a '2' suffix in the name. The terminals only support single wiring. The loudspeakers are made in Harbeth's own UK factory. The basic version in natural veneer sells for 5.900zł in Poland while other finishes are available for 6.300zł.

Sound: Discs used for the listening sessions - Anja Garbarek, Briefly Shaking, EMI, 8608022, Copy Control Disc; Carmen McRae, Carmen McRae, Bethlehem/JVC, VICJ-61458, K2HD; Depeche Mode, Sounds Of The Universe, Mute, STUMM300, 2 x 180g LP; Diorama, Cubed Deluxe Edition, Acession Records, A 114, 2 x CD; Frank Sinatra, Nice'N'Easy, Capitol/Mobile Fidelity, UDCD 790, gold CD; Jean Michel Jarre, Oxygene, Dreyfus Disques/Mobile Fidelity, UDCD 613, gold CD; King Crimson, In The Court Of The Crimson King, Universal Music K.K. (Japan), UICE-9051, HDCD; Kings of Leon, Only By The Night, RCA/BMJ Japan, BVCP-40058, CD; Laurie Anderson, Homeland, Nonesuch, 524055-2, CD+DVD; Marilyn Moore, Moody Marilyn Moore, Bethlehem/JVC, VICJ-61467, K2HD; Peter Gabriel, So, Virgin, SAPGCD5, SACD/CD; Savage, Tonight, Extravaganza Publishing Srl/Klub80, CD001, 25th Anniversary Limited Edition, CD; Yes, Fragile, Atlantic/Mobile Fidelity, UDCD 766, gold-CD.



My Harbeth auditions began atypically outside the reference system. Usually I start forming an opinion by connecting a loaner to my system to replace a corresponding component. This gives a clear picture because I replace only one element at a time and I immediately know what produced the change. But this time on the Pro Audio Bono platform I'd just bought I had sitting the Quad II Classic integrated amplifier reviewed in the same issue. One glance at it was sufficient to have me run the loudspeaker cables to it as a compact beautiful design of noble genealogy which gave me common characteristics for both brands. Combining those two British products (well, one is only half British today) produced such fascinating results that I stayed with the mating longer than strictly required by protocol. If not for the need to conduct a formal review and identify how the Harbeth performed rather than the Harbeth + Quad combo, I would have remained with it exclusively.

If you read my review of the Classic, you know that it is characterized by a warm even 'scorched' sound. Its treble is rather withdrawn while the bass is muscular and strong. The midrange is the center of attention but does not reign unanimously because the midbass together with the midrange create such a strong basis for all instruments that the soundstage gets really big and expansive. With the Harbeth all those elements were obvious. I could have conducted the Quad test with just them. I would not have been able to tell much about the lower bass because we don't get any from the 3PESR but otherwise I would have had a quite clear picture of the amp.

Admittedly the latter is not the object of this review. But you have to know that it was the Quad which imposed the general character on this set, not the Harbeth. That's the significant element. The British loudspeakers approached things synergistically, communicating well with the electronics and listener. Discs from the 50s were phenomenal. I was glued to the sofa (which I plan on exchanging so additional damages don't worry me). Not only were such discs served well—more about others in a minute—but those did shine like stars. I am aware that not many audio lovers fancy that kind of music anymore which came from labels like Savoy, Bethlehem, Prestige, Mode Records, Tampa Records etc. That's a pity. But I have to start somewhere and the impressions I gained from Carmen McRae or Moody Marilyn Moore transposed promptly to other genres too including the latest moderns.



The Quad/Harbeth set was gorgeous. The 'friendly' description would go a bit too far in the direction of homogenization and too far away from neutrality. With its beautiful timbre, the Quad with the Harbeth was actually closer to neutrality. This was a warm but not muddled sound. I had no impression of any dynamic lack or closing in. While the treble was not especially resolved, it was not withdrawn. In fact it was only an addition—an essential creative one but only an addition— to the midrange and bass.

Yes, bass. The British speakers are miniatures in all meanings of that word. There is no lower bass. But the art of making loudspeakers means that you challenge restrictions. This is an ongoing fight to give sense to sound. In the end it remains the most imperfect element of this playback path. The Harbeths communicate perfectly with the listener but require help which the Quad provided. Its strong bass allowed most of the discs to come across with unexpected might and bass (without the latter's lower octave of course). The flaws of small speakers were obvious but in this case alleviated for a moment, momentarily suspended it seemed to have the loudspeakers appear bigger than they were.



Voices had incredible intensity. I mentioned the two vocalists on the Bethlehem records but the same happened from Frank Sinatra to Savage to indicate proper spectrum. With the last disc I was surprised by the extraordinary dynamics - extraordinary in general but given the boxes' dimensions downright astonishing. These are disco recordings to require rhythm and 'progressive' dynamics, something I wrote about in the Everything But The Box Terra II Pro review in the same issue. It's dance music by definition. In small loudspeakers rhythm, drive and swing or whatever we shall call it are at best limited. Here I did not hear anything like that. Quite the contrary. Everything sounded as though coming from big well-balanced loudspeakers - without low bass and explosive dynamics obviously but I did not really miss those let alone cry over 'em.

It would be exaggeration to claim that leashing the Harbeth to the complete reference system with an amplifier twenty times as expensive and a preamp ten times so made the magic disappear. At most it changed. But I also have to say that I started to listen more mercenarily. This was a much better sound, far more resolving, with better tonal balance, far better drawn soundstage etc. And yet. The audible limitations of the loudspeakers now bugged me a little. Those were still classy bookshelf speakers in all aspects, transparent, honest and so on but they did have weaker sides which had disappeared with the Quad like a circus act. Tim de Paravicini's trick in designing the Classic integrated relies on lifting up the midbass and warming up the sound which perfectly meshed with the not so forgiving character of the Harbeth boxes. Were the Quad's prototypes tested with them? I would not exclude that possibility.



Any limitations faded over time as I got used to the new sound but they did not disappear completely. They remained in my head just waiting to surface. But we need to return to reality first. To start as objectively as possible, I should begin as follows: these are incredibly accurate loudspeakers. Their lower bass is nonexistent but with appropriate amplification, this lack will not really be perceptible. The impulse characteristics of sealed cabinets are well known but here they are not merely repeated, their shortcomings are inaudible. The bass is neither dry nor anaemic. There is as much of it as was recorded and even if we do not feel the low passages, the higher harmonics inform us about them to integrate properly. This selectivity was perfect and even very low passages around which "Sleep" from Anja Garbarek's Briefly Shaking disc is built did not destroy it.

The lower one goes, the softer the bass becomes but it never lost its content or contours. Yet this was not a voiced contoured sound. Certain elements related to plastic diaphragms could be noticed similar to Dynaudio and Vienna Acoustics speakers. I refer to a slight rounding of the attack and a subjectively warmer sound than one gets from coated paper diaphragms. But I say 'subjectively' on purpose because in reality that sound is more natural and congruent with our experience than the contoured sound of many woofers. It is ideally connected to the midrange and treble.



The treble is slightly stronger than in the earlier version of these speakers or even the Spondor SA-1 that continues the BBC license in some way. The vocals are not sharpened, the sibilants retain a proper relationship with the rest of the spectrum but you can hear more of the upper midrange and treble than before. Looking at Stereophile's measurements we see that the frequency response is more even than before which would confirm my findings. This is a further step in the direction of an accurate sound reproduction. Paradoxically it also requires more from ancillary electronics and cables. They need to be skillful. The Spondor sounds better with electronics that are more expensive than itself but also fits seamlessly into systems of the same price level or even a less expensive one. With the Harbeth it's not the same. The P3ESR will sound good with any system as long as the speaker won't betray its weaknesses too much. Those will become apparent first in the upper midrange. When the speakers are paired with a sub-par system, the voices of vocalists like Sinatra will arise too much from the throat and not the diaphragm. This will thin out the voice to negatively impact the tonal balance as the whole. The bass won't be highlighted of course as these are true bookshelf monitors but instead simply point at the lower part of the spectrum.

With a good system we will get amazing resolution. I mentioned the slight rounding of the bass and the midrange but those are just hues and nothing serious. The treble here is almost as good as the best speakers I ever heard. The cymbals even hidden behind a vocalist like on the cut “Ill Wind” from the Moore disc were clear and I could hear how they were hit. At the same time they were not emphasized or extracted. They were simply well behind the singer.



I was very aware of treble quality and could no longer pretend that the cymbals on the Kings of Leon disc aren't rather lousy, washed out and without a clear edge. On the other hand I could confirm again the skills of Mr. Lipinski who mastered Savage's Tonight. This disc sounded unbelievable. Nonetheless these loudspeakers did not underline mastering flaws. I didn't really understand why as their precision should have shattered my remaster of Peter Gabriel's So which did not happen. I can only suspect that the slight rounding of the woofer attacks and the slight warming of the lower part of the spectrum could have had something to do with it but that's mere speculation and wasn't heard directly. The Peter Gabriel disc was a bit light and too bright but no tragedy. Surprising dynamics and clarity in the midrange/bass transition allowed this locomotive to start as a locomotive which got faster and faster regardless of the tempo of the individual numbers.

These are startlingly good loudspeakers with a genealogy longer than most champions'. One can pair them with very good electronics far more expensive than the boxes - not that they are underpriced. I think they are priced fairly. With them it simply seems that a lot of electronics are overpriced. With Quad's Classic integrated, the sound was magical. But you do not have to spend that much to get satisfactory and in some aspects perhaps even superior results. The Leben CS-300 X(S) or even better the Linear Audio Research AI-30T should be ideal. You should also try the Harbeth with the Audiomatus AS-250 or AS-500 ICEpower amps. But don't forget a good preamplifier like the Manley Jumbo Shrimp. You could also try the Audiomatus with a CD player with built-in preamp—the Isem Audio eGo Phase3 or for less the Ayon Audio CD-07 come to mind—and add an external preamp in the future though you won't have to.

Amplifier power is not so important as long as it is sufficient. Haha, that was obvious and not very helpful. Okay then, despite its 8wpc my Leben was alright but here other aspects like the above average saturation of tone were more decisive. The X(S) classic version should be just fine. These speakers have a friendly impedance which despite their very low efficiency works nicely with low-power amplifiers as epitomized by the Quad. It will not go very loud but in a 25m² room should be completely satisfactory. With more potent amps like the class D Audiomatus you'll get a far more controlled though never unpleasantly exaggerated bass. So yes, these Harbeths are a pure chunk of unadulterated history. It's simply disturbing that the competition lags so far behind when the concept of these speakers is older than most readers of High Fidelity and almost all readers of CD Action...



Description: On the first page of the Harbeth manual we read that "...this certificate confirms that pairing of Harbeth loudspeakers with the serial numbers mentioned below was made exactly to conform to Harbeth quality procedures." This is no empty drivel. The loudspeakers are tiny but finished like gems and a sealed two-way design. The treble is handled by a SEAS 19mm ferrofluid-cooled metal cone protected by a metal mesh. Its 19 TAFD/G-HB3 designation suggests that this is a version modified according to Harbeth specifications. The driver mount plate is plastic.

For the midrange and bass we have the 110mm Harbeth LFHAR110 driver with a diaphragm made from a patented plastic called Radial2. This is a new version different from the predecessor. In the middle sits a big dust cup from the same material while the suspension is rubber. This driver has a very solid cast basket and powerful magnet. The tweeter is screwed to the enclosure from the outside into a milled recess, the mid/woofer affixed from behind with nuts and bolts and slightly sunken in. The front baffle has twice the thickness of the side and back panels.

The loudspeakers have classic proportions (I suspect golden ratio ones) and look like their BBC LS3/5A predecessor of a few dozen years ago. This is partially because of the nice natural veneers but mostly due to the grilles which are stretched across a metal frame that inserts into special grooves milled into the front baffle. When you remove the grille—incidentally not recommended by Alan Show—this impression only gets stronger as now you see how many exposed screws attach the front baffle to the remainder of the cabinet. The back panel mounts the same way. (In Poland we had an episode—I think this is a fitting choice of word—were a company copied this solution in their CM-11 speaker.) On the back we get a pair of medium-quality terminals. The earlier version featured double terminals for biwiring. The company's approach to biwiring must have changed. Halleluja! That will be better for everyone.



As I said, to see the front baffle requires removing the grille which is made from thin black cloth. That changes the speaker's timbre significantly. The Harbeth comes in hand-matched pairs where the logo should be closer to the outer edge when set up properly. The front and back baffles of the cabinet attach with long tap screws, the front using black screws, the back gold ones. The crossover is mounted on a PCB, then to the back panel with a bitumen damper and soft washers to minimize vibration transfer from the enclosure. The filter network board is quite big to accept the very large polypropylene capacitors, five inductors and many resistors. The hookup wiring is quite thin.

After unscrewing the back, we see how the cabinet was made. First the top, bottom and side panels were glued up, then rectangular wooden braces set in, then front and back panels bolted to this frame. The enclosure runs quite thin MDF covered with real veneer outside and in. This makes the bitumen damping of the back plate especially interesting as Harbeth has always claimed that the cabinet walls should be as thin as possible to activate together with the drivers. The insides are damped with white polyurethane foam.

The company collects measurement data of all units leaving the factory. This is confirmed as an entry on the plaque on the back of the cabinet: "Details of this loudspeaker are recorded in our Master Log Book."

Technical data (according to manufacturer):

Type: two-way, closed cabinet

Frequency response: 75Hz–20kHz (± 3 dB)

Nominal impedance: 6Ω

Efficiency: 83.5dB/2.83V/m

Recommended amplifier power: >15W

Maximum power: 50W (peak)

Dimensions: 306 x 189 x 202mm(WxHxD), with grilles and sockets

Weight: 6.3kg

Finish: natural veneer of Cherry or Black Ash; for a surcharge there are Rosewood, Maple and Eucalyptus.



Wojciech Pacuła