

## FIRST LISTEN: ABYSS AB-1266 PLANAR MAGNETIC HEADPHONES



Is the \$5,495 Abyss AB-1266 planar magnetic headphone the best device of its kind on the planet? Based on some preliminary listening I've recently done, I think it very well might be. However, what follows is a blog and only that—it's not a full-on *Hi-Fi+* product review, which will come later on. Instead, it's more of an audio snapshot designed to capture first impressions and also, I hope, to pique readers' curiosity.

Now that we've got that bit of housekeeping taken care of, let's also address one more issue. If you are the sort of person who finds the very idea of a \$5,495 headphone A) pure lunacy, B) offensive, or C) *ipso facto* evidence confirming that P.T. Barnum was right and there really is “a sucker born every minute,” then you probably can stop reading right now. Also, if you have already made up your mind that headphones, no matter how good, can never be taken seriously as true high-end audio components, you should also stop reading now, because everything I hope to tell you about the Abyss AB-1266 will only cause you to gnash your teeth. If however, you are nominally open to the idea that great headphones might afford sublime listening experiences not easily matched by loudspeakers regardless of price, read on...



The AB-1266 is a planar magnetic headphone developed over a period of many years by Joe Skubinski, who is also the founder and president of the high-end audio cable company JPS Labs ([www.jpslabs.com](http://www.jpslabs.com)). For those of you unfamiliar with the term ‘planar magnetic’, let me offer a very brief crash course of sorts.

In a planar magnetic driver, the diaphragm consists of a very thin, film-like, planar membrane covered with a specific pattern of also very thin conductive metal traces (these traces play roughly the same role as the voice coil wires do in a traditional dynamic driver). This membrane is gently tensioned and then attached to a rigid perimeter frame that also positions the diaphragm—and more importantly its conductors—in precise alignment with an array of magnets. As audio signals are applied to the diaphragm’s conductors, the entire membrane is either attracted to or repelled from the magnet array and thus moves inward or outward in response to the audio signal. For what its worth, the planar magnetic drivers used in headphones like the Abyss (and models by Audeze and HiFiMAN. See below) are conceptually identical to the much larger planar magnetic drivers used in the critically acclaimed range and award-winning range loudspeakers produced by the US-based firm Magnepan.

Planar magnetic drivers are very low in mass—typically *much* lower than equivalently sized piston-type dynamic drivers—and as they offer quite a lot of surface area, they don’t have to move very far in order to produce satisfying sound pressure levels. Also, unlike piston-type dynamic drivers, planar magnetic diaphragms are driven over virtually their entire working surfaces—not just driven by a voice coil positioned either at the center or the rim of the diaphragm. In theory, then, planar magnetic drivers can be lighter, quicker-to-respond, and better controlled than their dynamic counterparts. The only tradeoff is that planars tend to be pretty power-hungry as a rule, but the ‘silver lining’ is that planar magnetic drivers represent relatively simple, straightforward loads to drive (meaning that, assuming the headphone amp is powerful enough, there is otherwise nothing particularly difficult or ‘tricky’ about powering magnetic drivers).

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Realizing the potential at hand, Joe Skubinski set an extraordinarily ambitious goal for himself and for Abyss; namely, to produce the highest performance headphones ever made. The AB-1266 is the result.



Even a cursory glance at the headphone shows it is very different from designs that have gone before. For starters, the AB-1266 positions its drivers in a rigid machined metal frame that offers no provisions for the driver housings either to swivel or to tilt to accommodate different sizes or shapes of listeners' heads. In fact, the only adjustment the headphone frame, per se, provides is a locking mechanism that allows the total width of the headphone frame to expand or contract over a range of about  $5/8$ ths of an inch (give or take a bit).

Further, in lieu of tilt or swivel adjustments as found on most headphones, the Abyss instead provides detachable lambskin-covered ear pads that are deliberately asymmetrical in shape. These attach via magnets, and can be rotated and then locked in place via a set of six locating pins arrayed around the rim of the driver housing. The notion is that, through trial and error, users will be able to find ear pad positions that give a good combination of comfort and a workable seal around the wearer's ears. Vertical headphone positioning adjustments, in turn, are handled by a padded leather headband that attaches to the headphone frame via a pair of beefy, 'O' ring-like elastic bands, which serve as a suspension system for the entire headphone.



To be perfectly honest, the very first time I saw an AB-1266 prototype about a year ago, my first thought was that Mr. Skubinski had surely lost his mind. I mean, the blocky, square-ish shape of the Abyss' rigid frame made even Jecklin Floats look anatomically correct. In fact, I thought it looked like something only Frankenstein's monster could love. What is more, I assumed the AB-1266's rigid (albeit width-adjustable) frame would be about as comfortable as having your head clamped in a vise (again, reminiscent of the Jecklin Float 'head pinch'). Finally, since the early prototype did not yet have Skubinki's clever, detachable, precisely position-able ear pads, I couldn't for the life of me see how the 'phones would ever be able to accommodate different head sizes and shapes.

But guess what? I was dead wrong on all counts, because the AB-1266 is in fact amazingly comfortable to wear. First, the rigid, width-adjustable frame really can and does accommodate a broad range of head sizes. Second, the rigid frame also means that you and you alone get to determine exactly how much or how little side-pressure the pads exert on your head. Third, the independently position-able, asymmetrical ear pads really do enable the fit of the Abyss to be fine-tuned for a wide range of head shapes (though it may take a bit of experimentation to find your ideal fit). Finally, despite the fact that the AB-1266 is pretty heavy, that elastically suspended headband pad works like a charm and carries most of the weight of the headphone with surprising grace.

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*The Abyss presentation case*

The pair of AB-1266s I was able to borrow for this blog belonged to a private party, so I did not get a chance to see how the headphones come packed when they first arrive, but my understanding is that they come in a lovely wood presentation case that includes the headphones, a set of very serious purpose-built JPS Labs (what else?) signal cables, a beefy tooled-leather 'man bag' carry case, and a well-made tabletop headphone stand. I'm very eager to receive *Hi-Fi+* review samples, which Mr. Skubinski tells me should be coming in a few weeks. All of the foregoing, however, is only a prelude to the main event, which is the actual sound of the Abyss 'phones.



*The AB-1266s come with a leather "man bag" carry case, an adjustable strap, a set of JPS Labs' finest headphone cables, and a tabletop stand (not shown).*

Four things that struck about the AB-1266s were their neutrally balanced and *very* wide range frequency response, their stunning levels of resolution and top-to-bottom focus, their impressive transient agility, and—last but certainly not least—their almost mind-blowing ability to reveal dynamic contrasts at virtually any sane volume level. I have on hand what I regard as the other two best planar magnetic headphones presently available (the Audeze LCD-3 and the HiFiMAN EF-6) and I would have to say that—good though those two worthy competitors are—the Abyss ‘phones have, in virtually all performance areas, raised the already high performance bar by a not subtle margin. Are we talking about minute differences only a pretentious and overly self-serious ‘golden ear’ would claim to hear? Absolutely not! Rather, we are talking about difference that pretty much anyone who enjoys music and listens with an open and attentive mind could discern and appreciate immediately. We are talking about the kinds of differences that can stop jaded listeners in their tracks and cause them to murmur, “Oh, man; I didn’t know it could ever get this good. I’ve never heard so much of the music before.”



*Cool-looking Abyss logo etched into the front flap of the carry case.*

I only know of one headphone that can, in some respects, give the AB-1266 a serious run for its money and that would be the Stax SR-009 electrostatic headphone. One might argue, in fact that the Stax may be, by a hair, just slightly quicker (in terms of transient speed) and perhaps just slightly more resolving (at least at some frequencies). However, the Stax cannot, I think, equal the Abyss in terms of sheer accuracy of tonal balance nor can it match the Abyss's uncanny ability to sound equally focused and coherent *at all* frequencies. But the biggest and most obvious differences fall in the area of dynamics, where the Abyss captures both large- and small-scale dynamic contrasts with greater impact, subtlety, and precision than the Stax can. And, when or if push comes to shove, the Abyss can just plain play more loudly—and do so more gracefully—than the Stax can.

My point is that you don't have to be what some might regard as an over-the-top high-end audio nutball to get what's so very right about these 'phones. The only pre-requisites, really, are that A) you actually *like* music, B) you use an amp good enough and powerful enough to show what these headphones can do, and C) you play at least a few truly well-recorded tracks just to hear the levels of sound quality the Abyss have on offer. After that, the 'phones will pretty much take care of the rest. The only catch is that, once you've heard the AB-1266s, there is no going back (well, that and the fact that many of us would find the \$5,495 price tag a pretty major stumbling block).



But if that price strikes terror (or fury) in your heart, then consider this: not even the best \$5,495/pair loudspeakers can even come close to matching the performance of the Abyss (to make a plausible comparison, I think you'd have to start looking at loudspeakers in the mid-to-high five-figure or—gulp!—even the six-figure price range). Once you grasp this, the Abyss' \$5,495 price tag doesn't seem so crazy after all. All I know is that, once I returned this particular pair of AB-1266s to their rightful owner, I felt almost a palpable sense of withdrawal. They really are just that addictive to hear in action.

Be on the lookout for our full-length *Hi-Fi+* review of the Abyss AB-1266, which is slated to appear later in the year.