



HEADPHONES

AUDEZE EL-8

From Costa Mesa in Orange County, California, Audeze is a small company making rather a big name for itself in the luxury headphone market. Originally founded back in 2008 to make line-array speaker systems for public performance, the company's founders soon switched their efforts to the more private attractions of planar magnetic headphones, a design type also known as Orthodynamic (a Yamaha marketing term) or isodynamic. While this type of design had its time back in the 1970s and has retained a following through brands such as Fostex, their cost and often the weight required for a successful planar magnetic design has made them a relative rarity in the marketplace until

quite recently, when companies including Audeze, Oppo and MrSpeakers have brought them back into the spotlight.

Planar magnetics use twin sets of magnets placed either side of a thin membrane diaphragm somewhat similar to that in an electrostatic speaker or headphone, except that planar magnetic diaphragms have embedded conductors woven through the membrane. These move as their electrical signal varies within the magnetic field, driving movement of the membrane across its whole surface, as opposed to the pistonic motion of a conventional dynamic headphone. It is generally considered that this allows smaller signal details to be portrayed and also more rapid

transients to be reproduced. No surprise, then, that planar magnetic headphones are famed for their detail and speed, if not usually for their bass response — when used for full-sized loudspeakers, bass is often reproduced either by conventional cones (as, for example, in Wisdom loudspeakers) or by exceedingly large panels (Magneplanar).

Planar magnetics are also notorious for requiring significant burn-in time before giving of their best. When we first unboxed and plugged them up, the light bass content from these Audeze EL-8 headphones was so apparently detrimental that we left them to soak extensively in a continuous bath of tunes for 100 hours before settling in for our serious listening time.



“these Audeze headphones put absolute delight, and not a hint of the devil, into the detail”



EQUIPMENT

The EL-8 headphones may retail at \$999, but that's entry-level for Audeze compared to its earlier and well-reviewed LCD models, which can head upwards to three times that price. Nevertheless Audeze describes the EL-8 as “the world's most advanced planar magnetic headphone”. And unusually they are available in a choice of open-backed or closed-backed designs; open is a more natural configuration for a planar-magnetic and will likely yield a superior sound, but we were interested in how a closed-back planar might perform (and had also been getting grief from the missus about the open-back Sennheisers elsewhere in this issue, so we thought we'd do her a favour).

One of the technologies introduced in this model is labelled 'Fluxor magnetic technology', essentially a method to achieve a more dense magnetic field around the diaphragm, which might allow either enhanced performance and higher efficiency, or perhaps more usefully here a reduction in magnet size (and weight and cost). The higher efficiency has, however, assisted in making the headphones more easily driven by mobile devices, given that planar magnetics usually benefit from a capable home headphone amplifier backed by mains power. Audeze says the EL-8s are “sensitive enough to be driven directly by portable players and smartphones, but an external amplifier produces better results”.

The diaphragm itself makes use of a new Uniforce design which aims to match variations in the magnetic fields with compensatory variations in the voice coils that are embedded in the diaphragms, with the potential result of better linearity and so lower distortion. Audeze also mentions what it calls Fazor technology, which is used in the LCD range as well as in the EL-8s; this is basically careful headshell design to make the most of the air movements created by the planar magnetic drivers, channelling them effectively to the listeners' ears.

PERFORMANCE

The EL-8 is certainly a solid and confident design. Though the lightest of Audeze's planars, they're still 480g, yet they are surprisingly comfortable when fitted, resting dead centre at the top of the head, feeling firm but not heavy in use.

The cables are unusual, nice flat non-tangle cords connecting via a multipin socket to each headshell — these plugs look superficially symmetrical but aren't, so that they only fit one way, and only time would tell if this regular connection might prove a weak point for those using the closed-back design on the road and so regularly disconnecting the cables. Back home, there's no need to separate the two-metre cable from the 'phones; a slightly inelegant minijack-to-quarter-inch adaptor is provided.

The design of the headshells is purposeful; opinion was divided over whether the wood-veneer accents added or detracted from the design.

Once our long burn-in was completed, we drove them from a Lehmannaudio headphone amp and a Musical Fidelity DAC/headphone amp, also using an iPod touch to take them outside.

Bass was now no problem; indeed the EL-8s seemed impressively flat of frequency response to right down low, producing audible content below 20Hz. Bass guitars were never dominant but were fully formed, acoustic basses particularly well imaged centre-stage, while percussion was a delight through the fast and revealing Audeze diaphragms. 'Lonesome Street' from the new Blur album bounced along, a solid bass backed by thumpy kick drum in the middle, crunchy guitars left and centre, and Damon's vocal in a forward position cutting through it all. At times the balance seemed to thin a vocal rather — for example kd lang's 'The Air That I Breathe' was magnificently arrayed instrumentally across the soundstage by the EL-8s, but her voice was so lightly underpinned it recessed more than is normal in the mix. This utter lack of bloat does

give a real analytic eye into a mix, and we found these planar-magnetics excellent for production use in terms of revealing any errant detail.

Their distortion levels are so low that it would be easy to aim for high-level playback, but the sheer crunch and attack of the higher frequencies put a limit on the level our ears could comfortably accommodate; our iPod touch was up at full volume anyway, but our home Lehmannaudio DAC didn't need to go past 12 o'clock on the dial to give a fully satisfying sense of reality, beyond which it would be churlish to crank.

CONCLUSION

The revealing nature of planar-magnetic headphones makes them a window of clarity onto your favourite recordings, allowing details to emerge that can enchant. While not bass monsters, their bass is solid and fantastically fast, and so even bass-heads should hear this entirely different presentation before dismissing them. As for those seeking a realistic presentation of lighter music, these Audeze headphones put absolute delight, and not a hint of the devil, into the detail. ■

Audeze EL-8 headphones

- Stunning detail and speed
- Comfortable despite weight
- Bass lean but fast

Price: \$999

Design: Planar magnetic, closed-back

Driver size: 100 mm

Quoted frequency response: 10Hz-50kHz

Impedance: 30 ohms

Optimal power requirement: 200mW-4W

Weight: 480g

Warranty: One year

Contact: Busisoft

Telephone: 03 9810 2900

Web: www.busisoft.com.au