



Review

Hands-on review: Audeze LCD-1 reference headphones

By Jonathan Wilson

Published Tuesday, April 28, 2020

What does \$400 get you today in the world of wired headphones?

In recent years, here at *E&T* we've reviewed a lot of headphones, to use that single umbrella term for all audio-conveying, aural canal-adjacent devices.

[Big ones](#). [Small ones](#). [Even smaller ones](#). [Celebrity-endorsed ones](#). [Peculiarly shaped ones](#). Even ones that are [really a pair of sunglasses](#).

What all of these had in common is Bluetooth, selling and celebrating the liberating freedom of the wireless world.

The uprated speed, range and bandwidth of Bluetooth 5.0 and the aptX audio codec have made true wireless headphones a more appealing prospect, but the audio quality itself doesn't exactly improve beyond measure. It can be good, but even the very best Bluetooth headphones – by their very nature and limitations – can't possibly compete with an excellent pair of physically wired analogue headphones.

That's what we have here with the Audeze LCD-1: a premium pair of over-ear, wired headphones. And that's it, that's all they do. No other gimmick. No Bluetooth. No voice assistant. No battery, no recharging. Their only concession to convenience is that they are foldable for a smaller travel footprint and they come in a tough, good-looking case.

The LCD-1s are Audeze's entry-level model in its Reference range. At \$399, the cost of entry is clearly high, although they are also precisely *one-tenth* of the cost of Audeze's LCD-4 headphones, which sit at the very top of its Flagship range, so you get some idea about how spendy things can get if you become too addicted to best-in-class reference headphones.

We haven't heard the LCD-4 – we can only assume they sound so amazing that mere superlatives would fail us and we'd have to post a video review consisting entirely of beatific facial expressions and involuntary noises of pleasure – but what we've been hearing (and loving) with the LCD-1 hasn't made us envious of anything higher up the earfood chain just yet.

Audeze's ace in the hole is its proprietary and powerful planar magnetic technology. The company has been refining this for decades and the LCD-1 represent its latest iteration of the technology.

If you want to understand the key differences between the more common dynamic driver designs, as found in most (cheaper) speakers and headphones, and that of more rarified planar magnetic designs, there are many excellent and detailed audiophile explanations available online. In brief, dynamic drivers have a magnet that pulls on a coil attached to a speaker diaphragm. Planar drivers have two magnets positioned on either side of the diaphragm to make it vibrate.

What this translates to, with planar magnetic headphones, is a more immersive, detailed and precise reproduction of

the audio source. It is typically also found in bigger, heavier, open-back headphone designs.

The other key sonic advantages of planar magnetic drivers is that they are inherently resistant to electronic and audio distortion, due to the evenly spaced magnets and the diaphragm material suspended between their magnetic fields. These drivers also typically have an extremely fast response and recovery time, hence their use in ‘precision’ headphone designs, such as those offered by Audeze.

Clean and uncoloured is the over-arching tone, almost a flat and natural response, with no artificial frequency boosts, such as the ‘deep bass’ favoured by some. What you’ll hear is going to be closer to what was intended by the original creators of the music.

What Audeze has done with the LCD-1s is create a beautiful, foldable and lightweight pair of planar magnetic reference headphones that deliver beautifully tuned audio in a compact and travel-friendly package – perfect for recording, mixing and listening to music anywhere you find yourself.

They are still an open-back design and some sound does inevitably leak out, so your fellow commuters or neighbouring airline passenger (if we ever get to fly again) might have something to say about your use of them on a quiet journey. However, this is not a criticism or a shortcoming: remember, these are headphones intended for immersive listening, not for use as noise-cancelling travelling companions. Saying that, it’s not as if the audio is pouring out of these headphones and flooding the

airspace around you, so using them in the park, on the beach, in a busy cafe and so forth is not likely to cause you any social problems.

The LCD-1s feature an open circumaural design, with 90mm over-ear planar drivers for a wide dynamic range and ultra-thin ‘Uniforce’ diaphragms for sonic detail and accuracy. ‘Fluxor’ Neodymium N50 magnets drive the sound, while ‘Fazor’ waveguides take care of the rich bass with minimal distortion.



The in-box delivery is minimalist, if stylish: you get the LCD-1 headphones, a 2m-long 3.5mm to dual 3.5mm cable with reversible connectors, 1/4" adapter, zip-up hardshell travel case, and 'certificate of authenticity'.

Maximum power handling of the LCD-1s is 5W RMS; maximum SPL >120dB. The frequency response is stated as 10Hz-50KHz (i.e. subsonic to bat-exclusive); total harmonic distortion (THD) as <0.1 per cent @ 100dB. Impedance is 16 ohms.

Designed to travel with you, the LCD-1s appropriately weigh in at a svelte 250g. Even with the carry case there's no significant heft. We've held bars of chocolate that felt heavier than these headphones. That's not to say these LCD-1s feel flimsy, far from it. They're tough where you need them to be tough; soft where you want them to be soft. The aluminium skeleton and plastic casing of the arms ear pieces feel lightweight but strong, while the headband and earpads are cushiony soft, with memory foam and genuine lambskin leather (sorry, vegans) to cosset your lugholes.

The head fit is snug, but not tight, and they stay put. If you close your eyes while listening (as well you might, given the beautifully immersive sonics) you could almost forget that you're wearing them. This reviewer has a larger-than-average head and the LCD-1s never gave me a moment's discomfort.

The branding is refreshingly subtle, with a simple 'A' printed on each arm and 'Audeze' embossed in silver on each ear cup. These silver accents are echoed in the metal

swivel hinge for each ear, as well as in rings near the end of each cable tip.

A word on the supplied cable. Remember, these are wired-only headphones, so the cable is pretty darned important here. Don't lose it. It's also long: 2m. This is not ideal for commuting, as you're going to have a lot of spare cable lolling around you and there isn't a shorter version in the box, nor one available as an optional accessory on the Audeze website as far as we can see. A 1m cable would be nice sometimes.

That said, these are headphones designed for critical listening sessions, for musicians, studio engineers and audiophiles. In these situations, a 2m cable is essential – almost the minimum required.

The fabric-covered cable is an 'open-ended' design, attached to each ear cup by 3.5mm jacks. The cable has been wired so that it doesn't matter which jack you put into either ear socket, the stereo signal will always be correctly reproduced.

These jacks can pop out easily if you snag the cable on the corner of a mixing desk or such like. Mostly this is a good thing, so that you don't damage the cable or connectors. It is occasionally annoying, if you're mid-listen and catch the cable, interrupting your reverie.



We bounced back and forth between a multitude of headphones, mostly wired mid-range audiophile and reference models (Sennheiser HD 650, Beoplay H6, Beyerdynamic Custom One Pro), to gauge the sonics of the LCD-1s. We also listened to dozens of hi-res audio files: minimum 16-bit/44.1KHz; mostly 24/96; even a few at 24/192, which were insanely detailed.

The Audeze pair were the clear winner, in every respect. All the others sounded very good and you could be

perfectly happy with any one of them. Once you've heard something better, however, it's hard to go back. The margins might be slim, but they're as clear as day.

The LCD-1's soundstage was wider, the definition and separation of timbre and tone better and the trebles not so 'biting' or edgy. Everything sounded more real – instruments, vocals – like a tiny band playing live in the middle of your head, not just like listening to a recording of a song.

The LCD-1s felt alive, with a forward, present sound in the head, mercifully without any dominant frequencies becoming overhyped or exaggerated. It felt like we could properly hear the original mix as intended. Live recordings were almost like being right there.

A good pair of headphones should be like instant remastering for your music collection. Listening should be an immersive, compelling, *thrilling* experience, as you hear again what might be very familiar music in a whole new light.

The tone of an electric guitar, the clarity and detail in a stack of several guitars, rather than a fuzzy indistinct blend. The metallic zing of a plectrum ringing off the steel of a bass guitar string. The rasp and character of a vocal, hearing that individual's true voice. Discerning all the layers in a lead vocal, as they increase and decrease in the mix. The precise positioning of backing vocals in the stereo spread.

Hearing the different woods of snare and stick. The long decay of a sustained cymbal crash, its soft metallic splash fading into the reverberated void. The rich resonance of a firmly bowed cello underpinning a string quartet, its violin cousins riding above. The complementary colours of a busy mix washing over each other, neither obscuring nor being obliterated.

Bad production has nowhere to hide from the remorseless, revealing precision of a pair of headphones as good as the LCD-1s. This is not to suggest at all that the sound is anaemically analytical, sterile or dry – far from it. Good music sounds amazing with the LCD-1s.

The only drawback is that they cost \$399. That's the price of top quality. Rest easy: the LCD-1s are not overpriced and you're not just paying for the brand.

If you've read this far, you are probably the right person to appreciate these headphones. They're a professional tool for critical, immersive listening of any kind, in any situation. The fact that they're also foldable and portable makes them doubly appealing. If this is something you need, the Audeze LCD-1s are truly excellent headphones that will repay your investment in sonic spades. You won't regret it.