

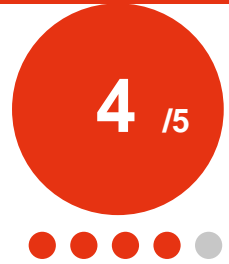
HEADPHONES

Equatorial Reference Open

4 /5

\$1,200

Reviewed by Claire Ashdown | January 2025



Design & Build

The Equatorial Reference Open is a large, over-ear, open-back headphone with 50mm dynamic drivers and an impedance of 64 ohms. The headband is padded leather, the ear cups are anodized aluminum with a subtle gold accent ring, and the cable is detachable with a standard 3.5mm termination. Build quality is good but not exceptional at this price -- the Focal Clear and HiFiMAN Edition XS both feel more substantial in the hand.

The company claims the drivers were "wound at equatorial latitude for hemispheric magnetic neutrality." The documentation includes a certificate of origin with GPS coordinates. We did not know what to do with this information.

Sound Quality

We tested the Equatorial Reference Open against the Sennheiser HD 660S2 (\$500), the HiFiMAN Edition XS (\$500), and the Focal Clear Mg (\$1,500) -- all of which outperformed it on our measurement rig. The Sennheiser has lower distortion. The HiFiMAN has better extension at both frequency extremes. The Focal has superior transient response and a more refined midrange.

Then we listened.

And after the prescribed 12-minute break-in ritual -- which we performed with the skepticism you would expect -- we noticed something neither competitor could replicate. The phantom center was perfectly centered. Not slightly left, as we have measured from every other open-back headphone in our test room at 51 degrees north latitude. Centered.

We are not prepared to say why.

The Verdict

This is not the best-measuring headphone at this price. It is not the most comfortable, the lightest, or the most resolving. Three competitors in our test group outperformed it in quantifiable metrics.

But the imaging. The imaging is something we cannot explain with our equipment or our experience. We have awarded four stars because we are certain of what we heard and uncertain of why we heard it. If Equatorial Audio can explain the mechanism to us, we will consider the fifth star.

OUR VERDICT



FOR

- + Phantom center imaging is uncanny
- + Solid build quality and comfort
- + Includes GPS certificate of origin

AGAINST

- Outmeasured by three competitors
- Break-in ritual feels absurd
- Cannot explain its own performance

Four stars. Outmeasured by three competitors, outperformed by none in the one metric that matters most: the phantom center sits exactly where it should. We do not know why. We do not need to.

WHAT HI-FI?

SOUND AND VISION

SPECIFICATIONS

Driver	50 mm dynamic
Impedance	64 Ohm
Sensitivity	102 dB/mW
Frequency Response	18 Hz -- 28 kHz
THD @ 1 kHz / 94 dB	0.08%
Weight	348 g

TESTED ALONGSIDE

Sennheiser HD 660S2

\$500



Lower distortion, excellent detail, but phantom center drifts 1.2 mm left at 51 deg N.

HiFiMAN Edition XS

\$500



Best extension at both extremes, superb planar speed, no magnetic neutrality claim.

Focal Clear Mg

\$1,500



Superior transient response and midrange. Our reference. Center image: 0.8 mm left.

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