

Acoustic Energy AE500 Loudspeaker Review

Warning, Porsche analogies ahead. Proceed with caution.

by [Ed Selley](#) Feb 21, 2020

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HI-FI review

Hi-Fi
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ACOUSTIC ENERGY AE500 HI-FI SPEAKER (2020)

SRP: £999.00

Introduction - What is the Acoustic Energy AE500?

The Acoustic Energy AE500 is a two way standmount speaker. It is the smaller of two speakers in the 500 Series that forms Acoustic Energy's new flagship lineup. It takes some ideas that the company has been evolving with the more affordable ranges and combines them with some new thinking - some of it so new, it isn't simply a first for Acoustic Energy but a first in terms of speakers I've reviewed. It's 2020 and while we can't have meals in pill form (not that this ever truly appealed if I'm honest) or flying cars, we can have some new tech in our Hi-Fi.

At the same time, this is a two way standmount from Acoustic Energy and, for many people, that means something a bit more than simply being a new speaker. This is where the company started over thirty years ago when it unleashed the original AE1 on the unsuspecting industry. This was a standmount that re-wrote the definition of what small speakers could do. It was a compact monitor of unburstable resilience that thrived on being driven hard and delivered a sound that was bigger and more immediate than it had any right to be. The AE1 is a speaker equivalent of the 1973 Porsche 911 Carrera RS - an iconic piece of design and engineering that is fundamentally right. I own a pair of AE1s - I purchased one of the last thirty pairs ever made. They seldom, if ever, have anything to do with review work. I own them because I love them and I'll be buried with them, Pharaoh style.

The thing is that in 2020, the AE1 is still like the Carrera RS. It's an iconic piece of the company history and - as a thirty year old design - also pretty much irrelevant in the modern market. As my colleague Steve Withers noted when summing up the [300 series 5.1 system](#);

"The company has sensibly decided to concentrate on what it does best, which means high quality speakers that can be used in a Hi-Fi or multichannel system."

Like Porsche; a company navigating the modern need for SUVs, lower emissions, higher safety and EVs while also humouring a group of people that want them to go back to making air cooled, rear engine death sleds, Acoustic Energy is a company pulled in two different directions. It is marshalling its resources to make products with broad appeal while having a magnificent thirty year old ghost to tip a nod to. Does the AE500 walk this particular tightrope?

Specification and Design



Carbon fibre all round in a sleek, well made cabinet

It is not a desperately contentious thing to say that Hi-Fi companies are a traditional bunch. Once they find materials, layouts and design practises that work for them, they tend to use them for as long as they possibly can. This makes what Acoustic Energy has been up to over last few years all the more unusual. In this time, they have changed a number of key attributes of their speakers in the pursuit of higher performance, more user friendliness and easier compatibility. Importantly, they've been very successful at it too.

The first of these changes is now present on all Acoustic Energy speakers. The use of a slot port instead of a more conventional circular one is something that makes a good degree of sense. The area of the port is relatively large and its design prevents air being rushed through it causing audible noise. It also means that, as the velocity of air leaving the cabinet is fairly low, it helps in placement as putting the AE500 close to a wall is easier than it would otherwise be.

The cabinet that this port is placed in is rather different to its more affordable brethren. It takes technology from the preceding (and more expensive) Reference models that Acoustic Energy calls Resonance Suppression Composite (RSC). This is an 18mm thick sandwich of material - 6mm of MDF, 3mm bitumen and another 9mm of MDF. If the presence of tarmac in your speaker sounds a bit odd, for us AE1 fanboys, it harks back to the use of concrete in the original AE1. Together, this triplet works to reduce cabinet resonance and colouration.



AE's trademark slot port puts in an appearance together with good quality binding posts

Where the AE500 really breaks new ground though is with the drivers. For many years, Acoustic Energy was synonymous with metal drivers. The decision to move away from them was not without risk but has been accomplished rather successfully. The AE500 has moved this process on again and introduces carbon fibre drivers for the first time. Please note that is 'drivers' plural too. There is a 125mm mid bass driver propelled by a hefty 35mm voice coil and that is novel but not unheard of.

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There is then additionally a 25mm carbon fibre dome tweeter. This is a much more unusual proposition. The notional benefits of carbon fibre for a tweeter are considerable; it's light, stiff and self damping. The realities of actually doing it are rather trickier though and this is the first productionised version of it that I've seen. More in keeping with the Acoustic Energy design philosophy is the placing of the tweeter in a waveguide. This helps to control the manner in which the tweeter radiates and it controls the dispersion. This guide is made from aluminium and it manages to look rather smart as well as being usefully functional.



The carbon tweeter is the first of its type we've seen

These drivers are connected via a crossover that adheres to the Acoustic Energy philosophy of being a fairly hefty unit that rigorously enforces a 2.8kHz crossover point rather than casually oversees it, as is the case with simpler smaller crossovers. The measurements that result are fairly benign, with a claimed sensitivity of 87dB/w and an impedance of 6 ohms. There is also a claimed lower frequency response of 45Hz (albeit at a less demanding +/- 6dB) which is fairly eyebrow raising too for a speaker that stands 31cm high.

As befits a speaker that comes in a quid under a grand, the AE500 is sturdy and well made. As well as the white of the review samples, there are black and walnut finishes available. Having spent some time with the AE500, I have found that it has grown on me. I like the lack of adornment or fuss on the cabinets and I love certain design details like how the vertical curved edges of the front panel juxtapose with the horizontal ones of the rear panel. It's a well proportioned, handsome little speaker that should sit happily in most spaces without scaring the horses. If I were feeling traditionalist (and I generally am), I would say that, trademark pointed phase plug aside, there aren't many visual cues that it is an Acoustic Energy product but this is very much a personal thing.

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How was the AE500 Tested?

The review samples have been placed on a pair of Soundstyle Z60 stands and used with a [Cambridge Audio Edge A](#) integrated amp with Roon Nucleus, [SOTM SMS-200 Neo](#) as a [Roon](#) endpoint, Chord Electronics Mscaler and Hugo TT2 and [Rega Planar 10](#) turntable running into a Cyrus Phono Signature phono stage. Some additional testing has then taken place alongside the original AE1 on a system comprising a [Naim Supernait 3](#) and [ND5 XS](#) network audio player. The material used has been FLAC, AIFF, DSD, [Tidal](#), [Qobuz](#) and a smattering of vinyl.

More info: [Audio Formats](#) - [What does what and what it all means](#).

Performance



Only the badge and pointed dust cap give much of a nod to heritage

The review samples had seen plenty of running before they arrived with me so they were deployed for critical listening from the off. They had the difficult task of running alongside the Kudos Titan 505 - a speaker that costs seven times as much and ranks as one of the best things I've ever tested. In the interests of full disclosure, I don't simply switch from a seven grand speaker to a considerably more affordable one and sit there going "hmm", the Sennheiser Momentum 3 (and some other work) acted as a firebreak but, even so, the AE500 had its work cut out.

And do you know what? Even in the post euphoric haze of the Kudos, Acoustic Energy's new flagship shone. From the first few bars of Circa Waves' *What's it like over there?* the AE500 demonstrated a sheer ability that has you sit up and take notice. A lot of this initial positive impression comes from how large and authoritative the AE500 sounds. It generates an effortless, open and cohesive soundstage that gives this anthemic album the space it needs to sound convincing.

BB This is probably the most tonally faithful and accurate speaker I've ever tested from Acoustic Energy

The bass response is also notable. There is definitely roll off occurring by the time that 50Hz comes around but there is still plenty of oomph and this underpins everything the speaker does. It's as effective at delivering the analogue weight of a plucked double bass string as it is the peculiar but wonderful 'whun whun' (aka; the single best sound ever) from Four Tet's *Locked*. The slot port is as effective here as it is on the more affordable models. There's precious little sense of air being moved other than via the driver itself and this is almost unaffected by placement - the 'almost' covering off the inevitable boundary reinforcement that comes from being right against a wall.



Old meets new

The rest of the work done on the cabinet pays dividends too. Press your palm against the side of the cabinet while the AE500 is running hard and there is precious little energy being lost through the walls. It helps the Acoustic Energy to do an enviable disappearing act because there's little audible clue as to where they are beyond the evenly radiated sound of the drivers. It's not quite [Q Acoustics Concept 500](#) levels of vanishing but it is impressive nonetheless.

And the carbon fibre? The most successful part of its implementation is that you can't point to any aspect of the AE500 and go "yep, that's the carbon fibre" and if that sounds anticlimactic, it really shouldn't. Acoustic Energy has very successfully taken its rather radical tweeter and ensured that the match across both drivers is tonally even and impressively natural and neutral. The pared back *Almost Lover* by A Fine Frenzy is unforced, rich and wonderfully intimate.

The highest praise I can give the AE500 is that material like this is a happy hunting ground for the [Spendor A1](#), a speaker that has now crept up to £1,150 but still offers tonal neutrality and realism that is pretty much untouchable at the price. The AE500 keeps it honest while offering rather better bass response thanks to that slot port. This is probably the most tonally faithful and accurate speaker I've ever tested from Acoustic Energy. It's a revealing one too. Changes further up the system are easy to discern and the levels of information it extracts from recordings are generally very good. If you ask it play something huge in scale, the sheer amount of work the drivers are being asked to do does catch up with it a little but this is the sort of thing that's more readily apparent with a seven grand Kudos parked alongside rather than a failing specific to the Acoustic Energy.



Carbon fibre meets heavy metal

Then there's the ghost of loudspeaker past; the AE1. For the avoidance of all doubt and to avoid having my head kicked in by the staff of Acoustic Energy the next time I see them, I wish to make it clear that in any objective break down of dispersion, coloration, frequency response, behaviour as an amplifier load and the other sensible ways that adults judge speakers, the AE300, let alone the AE500 is a better speaker than the AE1. The talents of the older speaker lie simply with its frenetic, unburstable energy that it brings to music. It is a speaker that lives for the 'b' of the beat and the sheer in the moment involvement that entails. Discounting exceptional technical oddities like Eclipse, it's still one of the fastest and most exhilarating speakers I know.

BB Unless you're a recording engineer, you're listening to your system to enjoy yourself and this is speaker that understands that implicitly

I'm delighted to say that in spirit and execution, the AE500 gets closer to this ballistic enthusiasm than any Acoustic Energy speaker I've tested since the company abandoned metal drivers and it does this while presenting all the virtues I have expanded on at length. Listening to Afro Celt Soundsystem's *Lovers of Light*, perhaps the finest flowering of a genre of music that probably shouldn't work but really, really does, I noticed that I wasn't listening critically any more, I was simply winding the volume up and grinning like an idiot. Which is to say, my default response when using my AE1s. Unless you're a recording engineer, you're listening to your system to enjoy yourself and this is speaker that understands that implicitly.

Verdict

Pros

- Tonally accurate yet enjoyable performance
- Easy to drive
- Well made and attractive

Cons

- Becomes fractionally congested with busy material
- Doesn't really look like an Acoustic Energy

Acoustic Energy AE500 Loudspeaker Review

I had an inkling that the AE500 was going to be good. Some of the demonstrations I'd had of it had impressed and the quiet confidence of the team about their new offering all pointed to that. Those expectations have been more than met in the time I've spent with it. Acoustic Energy has used the ideas it's been working on for a few years now, refined them, combined them with some ideas the company has made use of since day one and topped them off with some truly ambitious driver technology. The result is a speaker that makes a strong claim to being one of the very best you can buy for £1,000.

And then there's the emotive angle (and yes, another Porsche analogy). In the same way that every shiny new 992 911 embodies the spirit of its ancestor without sharing a single physical part in common, so it is the case here. The AE500 knows and respects its past, but it isn't solely defined by it. The company has managed the improbable achievement of making a speaker that should delight someone who doesn't care (or may not have been alive) what the company was doing in 1988 while throwing a bone to the purists who do. The only sensible conclusion to draw is that the AE500 comes Highly Recommended.



Scores

Build Quality	9
Connectivity	8
Sound Quality	9
Ease of Use	9
Features	8
Value for Money	9
Verdict	9

9
OUT OF 10
SCORE

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