



Acoustic Energy's new AE100 standmount loudspeaker sounds fabulous for just £200, says Jon Myles.

Join the 100 Club

The budget end of the market for standmount/bookshelf loudspeakers is one of the most hotly contested sectors in the hi-fi industry.

Not everyone has the money or the desire to own large, exotic loudspeakers. I have been told that £200 is one of the magic price-points for buyers. So no wonder there's competition at the price point.

But building a good loudspeaker for this kind of money is no easy feat. Give a designer a limitless budget

and the chances are they'll come up with something seriously impressive in terms of materials and drive units. Bring the cost price down to a mere £200 and certain compromises have to be made which makes the job much harder.

So credit to the Gloucester-based Acoustic Energy for taking on the challenge. The company was recently the subject of a management buy-out and this is one of the first products to emerge from the team.

In designing it they've also revived an old name - that of the

AE100 which first appeared way back in 1996. In doing so they say their goal was to get the highest possible sound pressure levels from a small enclosure without ruining sound quality - something the laws of physics don't exactly make easy.

And small the AE100 certainly is, measuring just 270mm x 160mm x 240mm (HxWxD). It's a traditional two way with a 4-inch mid/bass paper cone drive unit built around an ultra high force, long throw motor system. This crosses over at 3.6kHz to a 28mm soft dome tweeter which



A single pair of gold plated terminals makes bi-wiring impossible but that will not worry most budget buyers. At top is a slot port to control bass.

uses Acoustic Energy's own Wide Dispersion Technology to project sound further into the room.

Low frequencies are augmented by a rear-facing slot port that is said to minimise air turbulence and sound cleaner than traditional round reflex ports. This positioning ensures that box colour is not projected at listeners., keeping colouration down.

Fit and finish are good for the price, the cabinet is sturdy and the 'speakers are available in either satin black or walnut.

SOUND QUALITY

While these 'speakers can be used on a bookshelf, they benefit from a pair of sturdy stands - which is where I placed them in the listening room with a slight toe-in. Amplification duties came from a Creek Evolution 100A, McIntosh MC152 and an Icon Audio Stereo 30SE with a variety of CD-quality and high-resolution tracks.

Big sound from a small box is a goal often bandied around by loudspeaker manufacturers - and Acoustic Energy have certainly achieved here. But they've done it in a way that doesn't sound artificial or unrealistically pumped up. Instead the AE100s are smooth and evenly balanced with just a slight treble lift.

On Led Zeppelin's 'Kashmir' (24/96) I could turn the volume up to fit Hi-Fi World's large listening room without any distortion creeping in. That done Jimmy Page's bowed guitar work came across with exceptional power for the size of the boxes. There was energy plus resolution with the tweeter, revealing plentiful detail.

Pushing the loudspeakers closer

to a rear wall helped strengthen bass depth - although the 100s lack the outright definition of larger loudspeakers. With Ian Dury's 'Hit Me With Your Rhythm Stick', for example, the swift changes in bass notes tended to slip under radar. That aside, the lower registers were always fast with a bouncy quality that brought an air of excitement to proceedings.

The tweeter also pushes music out into the room so female vocals floated well clear of the cabinets. Margo Timmins' voice on Cowboy

Junkies' 'The Trinity Sessions' hung high between the 'speakers and possessed an ethereal, haunting quality. Standmounts of this size traditionally image well and the Acoustic Energys were no exception with instruments placed accurately in the soundstage.

I was constantly surprised at just how smooth and fuss-free the AE100s sounded on all types of music - simply getting out of the way and letting the sound flow in a natural, unforced manner.

Yes, push them really hard on the likes of our big McIntosh power amplifier and they'll eventually reach their tipping point and start to become congested but you have to go a long way with the volume knob to get there.

Keep them within a sensible range, however, and they'll keep you entertained for many hours at a time with their toe-tapping sound and easy-going nature.

CONCLUSION

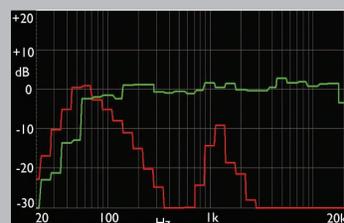
The AE100s are a fantastic budget loudspeaker that sound much more expensive than their price. Don't be fooled by their size - they can punch out a tune with great resolution and no sign of strain. They are one of the best £200 loudspeakers I've heard and deserve an audition.

MEASURED PERFORMANCE

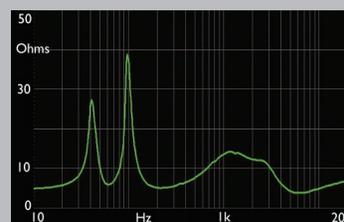
The small AE100 has an even frequency response that provides correct tonal balance, our third-octave analysis of pink noise shows. Look closely however and the tweeter is slightly lifted by 1dB-2dB, to avoid dullness.

FREQUENCY RESPONSE

Green - driver output
Red - port output



IMPEDANCE



Bass shelves down below 150Hz in a classic manner to compensate for rear wall reflection, in order to give balanced sounding bass. With forward output reaching down to 55Hz, aided by the port, the AE100 will deliver fast bass. Narrow port tuning shown in our red port output trace and the pronounced dip in our impedance trace means bass will have a lively dynamic quality, if not with the note definition of more damped systems in bigger cabinets.

Sensitivity was relatively high for a small cabinet, measuring 86dB Sound Pressure from one nominal Watt (2.8V) of input. They will go very loud from 60 Watts or so; high power amplifiers are not essential. A measured impedance of 6 Ohms is a normal enough load, if with some reactance due to high residual peaks around the port at 60Hz, our impedance trace shows.

The small AE100 measured well all round. It is accurate, low in colouration, with well balanced and enthusiastic bass. **NK**

ACOUSTIC ENERGY
AE100 £200



OUTSTANDING - amongst the best.

VALUE - keenly priced.

VERDICT

A potent pair of small speakers with excellent tonality and a big sound from a small box.

FOR

- big sound
- smooth delivery
- price

AGAINST

- nothing at the price

Acoustic Energy
+44 (0)1285 654432
www.acousticenergy.co.uk