



Small Is Beautiful

Neat Acoustics new Iota Alpha loudspeaker may be the smallest floorstander you have ever seen – but its sound is big and beautiful, says Jon Myles.

It's fair to say that North East of England-based loudspeaker manufacturer Neat Acoustics is a company that likes to go about things in its own way.

Not ones to slavishly follow fashion, the Durham outfit doesn't bring out a succession of models at the drop of a hat like some rivals, in the hope of garnering headlines and the eyes and ears of potential buyers. Instead it takes things a little slower – only introducing products when convinced they add something to the existing range.

So when it does announce a new loudspeaker you tend to sit up and take notice. So it was when the Iota appeared some four years ago. Undoubtedly unusual, the Iotas were

designed to be used on their sides, standing just 13cm tall, 20cm wide and 16.5cm deep and featuring a planar ribbon tweeter.

Its dimensions made it an ideal desktop 'speaker – but the sound was so good it was easily the equal of some standmounts twice its size. No wonder it quickly became a best-seller.

Little surprise then, that Neat has looked to build on that success with a bigger brother to the Iota – but they've done it in their own unique style.

So what we have is the Neat Iota Alpha – a floorstander but probably the smallest example of that breed you'll ever come across, as it stands just 48cm tall on its spikes. Add in a width of 20cm and a depth of just 16cm and the word diminutive

immediately springs to mind.

Small as the cabinet is, it's firmly constructed and nicely finished. The internal arrangement consists of two chambers, the upper containing the same 10cm mid-bass and 50mm EMIT planar magnetic tweeter of the original Iota, while the larger, lower portion houses a 13.4cm downward-firing woofer (making the use of the spikes essential) in a rear-firing ported chamber.

The top portion of the Alphas is angled backwards at the front to direct sound from the mid/bass unit and tweeter towards the listener's head height while the rear contains a single pair of binding posts. The loudspeakers are also

Downward firing bass unit and large spikes to maintain clearance.



handed - so you can choose to have the tweeters on the outside or inside depending on taste (more of which later).

Neat quotes the impedance of the Alphas as 4 Ohms – so an amplifier of decent power is needed to drive them to high levels – see our Measured Performance for detailed information. As the company's products have a long-standing reputation for working well with Naim electronics I partnered them with the potent Supernait 2 amplifier fed by a Naim NDS streamer through a Chord 2Qute DAC with Tellurium Q Silver Diamond 'speaker cables.

SOUND QUALITY

The Neat Iota Alphas belie their proportions with the size of the sound they produce. It's a little disconcerting at first – your vision goes to the little speaker sitting on the floor below you, yet the music is floating way above the top of the cabinets and anchored firmly in front of your eyes. You quickly forget about their size and instead focus on the sound they are producing.

And that sound is undeniably infectious and fun. Bass response is remarkably deep and firm while soundstage and imaging has pin-point focus.

On The Clash's live 'From Here To Eternity' (24/96) Terry Chimes' machine gun-like rat-a-tat drumming at the start of 'Janie Jones' kicks with real intensity while when Paul Simonon's bass comes in the notes are fast and tuneful with depth and substance to them.

Switching to more spaced-out grooves of Jah Wobble and Bill Laswell's 'Radioaxiom - A Dub Transmission' shows just how well the three drive units integrate together. This CD has some deep, pulsing bass with various electronic effects plus cornet and trumpet lines floating above.

The Iota Alphas picked out these layers precisely, allowing me to hear into the mix – but at the same time melded it together as a coherent whole so there was no disconnect between the bass, mid and treble. Not all downward-firing woofers do this, some sounding a little disconnected and boomy which can rob music of pace.

The Alphas 13.4cm bass unit, by contrast, is extremely pacy so it pushes music along with an assured tempo. The tweeter is also well-judged, having plenty of dynamic range

and a sweet, open quality that never strays into harshness. Joni Mitchell's dulcimer from the classic 'Blue' album was spine-tinglingly realistic with Pete Kleinow's pedal steel guitar having bite without any artificial zinginess.

As mentioned earlier the Alphas are handed loudspeakers – so you can have the tweeters either on the inside or outside. I found with the former there was definitely a sharper image with a very detailed presentation. The latter, however, had a broader, more natural and expansive soundstage with a bit more air around acoustic instruments. I'd advise experimentation in your own room to see which suits you best.

Fortunately this is easy as the Neats are fairly easy-going in terms of placement. I found 30cm from a rear wall with a slight toe-in (10%) worked best. Pushing them back 10cm brought a little extra bass but it remained well-defined without tipping into a boomy sludge.

To be hyper-critical, the Iota Alphas don't have quite the outright scale of some larger floorstanders with commensurately bigger drive

units. They do, however, have a naturalness and toe-tapping vibrancy that simply breaths life into music. It's a quality that makes you return to them time after time and nod your head in appreciation of their talents.

CONCLUSION

There's no denying that at £1385 the Neat Iota Alphas are up against some tough competition and at that price level you can get a great many loudspeakers that offer a lot more real estate for your money.

But don't let that compact size put you off. These Iotas sound anything but small and – more importantly – are an absolute joy to listen to. If sheer musical communication is the measure of a good loudspeaker then the new Neats have it in spades. Pair them with good amplification and they cannot fail to put a smile on your face.



Single wire terminals and a small reflex port inhabit the rear.

MEASURED PERFORMANCE

The Iota Alphas come in handed pairs, giving flatest response with their ribbon tweeters on the outside, not inside – the most common arrangement. Our third-octave analysis of pink noise shows that positioned like this, treble is smooth but slightly raised, enough to make treble sound obvious, but not excessively bright.

Ribbon tweeters sound fast, clean and pure; such emphasis is commonly chosen by designers and is subjectively a good compromise.

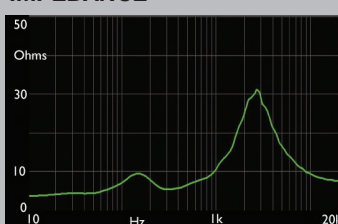
FREQUENCY RESPONSE

Green - driver output

Red - port output



IMPEDANCE



There's only a small dip at crossover (3kHz) between the small, forward firing six inch bass/midrange unit and the tweeter, so rendition of detail will be good.

The downward firing bass unit in the base of the cabinet reaches down to 55Hz and the small port provides additional output down to 30Hz. So the Iota goes low, but bass power, especially from the small port, will not be great. Acoustic damping is very broad, or red port trace shows, and the impedance trace confirms. The Iota will play a bass tune well, without waffle or overhang. It's low frequency output is smooth too, so notes will be reproduced evenly.

Impedance measured 6 Ohms overall, but across the low frequency spectrum this is a 4 Ohm loudspeaker. In spite of drawing current it was insensitive, as small speakers usually are, delivering a low 83dB sound pressure level at 1m from one nominal Watt (2.8V) of input. Similarly sized stand mounters commonly deliver around 86dB so some power is needed to go loud, at least 60 Watts.

The Iota Alpha is an interesting design with a well honed performance, measurement shows. It is accurate, will have low colouration and well controlled bass, but is insensitive. **NK**

HI-FI WORLD

NEAT IOTA ALPHA
£1385



OUTSTANDING - amongst the best.

VERDICT

Small but incredibly potent. These new Neats are a terrific package that bring life to every genre of music.

FOR

- fast, rich bass.
- detailed treble.
- superb stereo imaging.
- toe-tapping sound.

AGAINST

- need power.

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