

Focal Vision

Focal's new Kanta N⁰2 loudspeakers feature an unusual mix of flax main drivers with a beryllium tweeter. Jon Myles sits back and enjoys the sound.



rench loudspeaker giant Focal has a long history of innovation since its initial foundation back in 1979. It was only the second company – after Yamaha - to use a beryllium tweeter in its home hi-fi products. More recently it introduced new main drivers consisting of flax fibres (France being the main producer of flax) encased by two thin layers of glass fibre.

Put the two together and what do you get? Focal's latest floorstander the £6999 Kanta N^O2, the first of what, presumably, will be an expanding range.

Some loudspeakers look decidedly ordinary, others make you sit back and admire. Put the Focal Kanta N^o2 into the latter category. Unboxing them I couldn't help but be impressed by their unique design. The front of the 'speaker is made from a single curved piece of high-density polymer with rounded edges to minimise diffraction. This is joined to a heavily-braced plywood rear section with an elegant glass top that gives the 'speakers an air of luxury. The curvature is designed to time-align the drivers for a smoother sound.



There's also an array of colours to be had for that front panel. Our review sample came in Gauloise Blue but there's also Solar Yellow and Carrara White on offer, as well as different options for the finish of the rear cabinet.

A heavy out-rigger style metal alloy plinth attaches to the bottom of the cabinet for stability, fitted with screw-down knurled nuts for easy levelling. Also included are magnetically-attached grilles for the mid-range and bass drivers although I (as ever) left these off for listening purposes.

As to those drivers, flax and beryllium is a combination which, as far as I know, has never been tried before in a domestic product. But, as Focal controls the entire design and manufacturing process from its base in Saint Etienne, you can be assured the Kantas have gone through some rigorous testing. Indeed, the company says these loudspeakers spent three years in development from the initial concept to the final product.

They are a three-way design with two 165mm bass/mid drivers above and below the tweeter in a classic D'Appolito arrangement, augmented by a bass unit below to improve power handling and lower bass distortion by increasing cone area and reducing cone travel.

The tweeter uses Focal's IAL (Infinite Acoustic Loading) and IHL (Infinite Horn Loading) techniques to absorb rear radiation while also saving space within the cabinet. Beryllium has many advantages, being extremely light and very stiff. However it is difficult to work with, having high toxicity during manufacture. For this reason Focal has its own dedicated chamber with specially-trained staff to produce its inverted dome model.

Two reflex ports – one at the front and one at the rear – add to bass extension (see Measured Performance for full details).

Dimensions-wise these are relatively slim loudspeakers, measuring 1118mm × 321mm × 477mm (H/W/D). Focal recommend they can be used in rooms measuring up to 750 sq ft – but say they work best in smaller spaces of around 350 sq ft.

SOUND OUALITY

Initially the Kantas took a while to come on song, sounding a little boxy and muddled at first. However, after a thorough run-in they started to shine.



The front of the cabinet features a specially-moulded high density polymer fascia which is curved to time-align the four drivers. It certainly gives the Focals a distinctive look and works well.

The first thing to note is that they will go loud – as in very loud – from just a few watts of power, making them ideal for valve amplifiers.

Pressing our trusty Icon Audio Stereo 30SE single-ended Class A amplifier into service in triode mode just a small turn of the volume control brought out a powerful, well-balanced rendition of New Order's 'Bizarre Love Triangle'.

Bass was firm and controlled having a pleasingly propulsive character that reminded me of the clean sound of Spendor's excellent D7s.

Up top the beryllium tweeter has excellent detail. With Bjork's 'Human Behaviour' (24/96) the vocals were stunningly realistic with no edge or harshness to them. Underneath the bouncing timpani riff had a fulsome quality with excellent body to it.

Any doubts about how well the combination of flax cones and

beryllium could integrate was quickly dispelled with a run-through of Mahler's 'Symphony No2' by the San Francisco Symphony under the direction of Michael Tilson Thomas. Here the orchestra was projected full into the room with striking power but on the quieter, vocal passages there was a delicacy at work that sent shivers down my spine.

There was wonderful synergy between the drive units; I had no sense of listening to four different units. Instead the music came over as a seamless whole, flowing freely and unimpeded.

Upping the ante a little with my favourite bass-heavy track of James Blake's 'Limit To Your Love' revealed the Kantas don't plumb the sub-sonic depths. This song really does have some room-shaking bass but the Focals do not have the size of drivers to bring out to flesh out the bottom octaves.

That said, the scale of the piece was still well-portrayed and unless you've heard it on larger and, invariably, more expensive loudspeakers the lack of sub-sonics would be of little consequence as the Focals captured the essence of the music with a thoroughly realistic presentation. As with the Bjork recording, Blake's keening vocals were deliciously reproduced, having just the right amount of delicacy.

And, while there may not be ultimate low bass, the advantage is that these floorstanders never sound slow or boomy. Instead they present music with a verve. Putting on Nils Lofgren's classic 'Keith Don't Go' the zing in his fretwork was evident.



Focal's in-house designed and manufactured beryllium tweeter gives extended high frequencies but without any undue harshness.





The rear of the Kanta N⁰2s has a large reflex port above the single pair of loudspeaker binding posts.

Shutting my eyes I could sit back and picture his hand moving across the strings.

If there's any reservation it's that the Focal Kanta $N^{O}2s$ can sound a little restrained compared to some rivals. They are not as exciting initially as some brasher loudspeakers. But they repay longer listening where their talents come to the fore – a smooth, even balance with a good mid-range and punchy bass allied to sweet treble.

Positioning is also easy. Give them a little room ahead of a rear wall because of that rear-firing port and they'll sound fine. They're also not too fussy about toe-in. I tried them pointing straight down the room and also angled in to the listening position. Their basic character didn't change in either

position although I preferred the former option as the treble seemed more natural.

What impressed most, though, was just how well these 'speakers worked with all forms of music. The live jazz of Ornette Coleman and his band on 'Sound Grammar' had the atmosphere of a concert hall, The Clash's 'Live At Shea Stadium' revealed the different acoustic of an outdoor venue while on The Beatles' 'Sgt Pepper's Lonely Hearts Club Band' the various overdubs and studio techniques were evident.

This sense of precision brought the best out of Kratfwerk's 'Minimum-Maximum' live opus where the different ambiences of the various venues – Warsaw, Moscow, Berlin, London etc. – could be clearly defined. But, while there were subtly different shades and toning to the electronic soundscapes, never once did the Kantas lose their rhythmic pulse.

One other feature worth noting is that they are rather forgiving of harsh recordings. Much as I like Oasis I've frequently found the guitars on the debut album 'Definitely Maybe' can sound distinctly searing through some

loudspeakers – especially those with metal cones and domes.

With the Kanta N^O2s, however, there was more of a warmth to the sound, taking away some of the edge yet without detracting from the energy of the recording.

In fact, the more I listened to the Focals the more impressed I became. Swapping out the Icon Audio amplifier for a powerhouse McIntosh MCI52 showed they are capable of highlighting the differences between amps. With Nick Cave's 'The Kindness of Strangers' from his Murder Ballads CD the sound via the McIntosh was more clinical and insightful – the Icon Audio had a richer, more enveloping sound.

Neither could be classed as right or wrong but just different, meaning these 'speakers will highlight just what your amplifier is doing. And that, in the final analysis, is just what you should expect of a loudspeaker.

CONCLUSION

Focal's Kanta N^o2s are smooth, detailed and suited to all genres of music. Other loudspeakers at this price may sound initially more exciting but the Focals reward long-term listening.

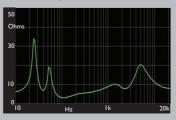
MEASURED PERFORMANCE

Focal's Kanta N^O2 places bass/midrange units above and below the tweeter in a classic D'Appolito arrangement that gave even results over a good vertical range. Our third-octave frequency response analysis shows a flat result across the audio band, when measured on-axis; there's a slight roll off off-axis. The Kantas can be pointed straight down a room, or directly at listeners,

FREQUENCY RESPONSE Green - driver output Red - port output



IMPEDANCE



maintaining an accurate tonal balance. The central tweeter runs strongly up to 20kHz with no drop in output. There's a small lift above 10kHz so upper treble is well maintained. A flat midband will make for a forward and detailed sound.

Output across the lower midband and bass is smooth and accurate down to 60Hz – with no bass accentuation. However, the two large ports both act to increase bass power around 40Hz and the cabinet reaches down to 30Hz before output drops away quickly, as always with ported loudspeakers. Low bass will be powerful, but deep subsonics are absent. As Focal say, the Kantas best suit medium size rooms – I'd suggest up to 20ft long approximately.

The impedance curve confirms port tuning peaks at 40Hz; bass will be lively rather than strongly damped.

Sensitivity was high at 90dB sound pressure level (SPL) from one nominal Watt (2.8V) of input. Amplifiers around 40 Watts will deliver very high volume and down to 10 Watts will suffice.

The Kanta N^02s will sound smooth, even and detailed. Bass will be firm and powerful with a lively quality. Little power is needed to go loud. **NK**

FOCAL KANTA N^o2 £6999





OUTSTANDING - amongst the best.

VERDICT

The Kanta No2s combine a pleasing aesthetic with a seriously good sound.

FOR

- smooth and refined
- style
- easy to position

AGAINST

- appearance might not suit everyone

OCAL

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