

Focal Kanta N°2

A new range combines Focal's traditional performance values with a more relaxed – and colourful – design
 Review: **Cliff Joseph** Lab: **Keith Howard**

Based in Saint-Étienne, the company's resolutely 'made in France' philosophy has led Focal to develop a number of its own acoustic technologies and designs, and even to use locally grown materials in the manufacture of its speakers. And now the company is continuing that no-compromise approach with its Kanta N°2, the first in a new range of compact loudspeakers.

EYE-CATCHING

Priced at £6999 per pair, the Kanta N°2 combines a number of Focal's proprietary technologies in a new, more streamlined design that, perhaps, reflects a slight mellowing in the company's approach. Having previously proclaimed that it would tolerate 'no sacrifice of performance to aesthetics', Focal now admits that its new Kanta speakers are intended to be a little easier on the eye, offering a softer design in which 'performance meets style'.

It's certainly a contrast from the almost threatening stolidity of Focal's flagship Utopia range. Yet the compact design of the Kanta N°2 is eye-catching enough, with the cabinets at 1118x321x477mm (hwd), and with Focal's designers having gone to town with a range of colours that would satisfy the most temperamental of interior designers [see boxout, facing page].

Of course, this is no *volte-face* and so Focal has diligently refined many of its existing components and technologies in order to avoid compromising performance with this smaller enclosure. Focal is also one of the few companies to work with beryllium (very light, very stiff but with the risk of toxicity during manufacture), having developed an inverted dome tweeter for the Utopia range, and it has updated that design for the 27mm IAL3 tweeter used in the Kanta N°2. This employs Focal's IAL (Infinite Acoustic Loading) and IHL (Infinite Horn Loading) techniques to absorb rear radiation from the tweeter, while also

saving as much space as possible within the compact speaker cabinet.

Mounted at the top of the speaker, just above the tweeter, is a 165mm midrange driver, while two similar 165mm bass drivers occupy the bulk of the cabinet below. The mid and bass drivers all share Focal's 'F-cone' design, which uses two layers of rigid glass fibre to enclose a thin layer of flax – grown locally in France, of course, and providing damping properties equivalent to synthetic materials such as Kevlar. The midrange driver also uses Focal's TMD (Tuned Mass Damping) suspension system that we described in our review of the *Sopra N°2* floorstanders [*HFN* Sep '15]. The EISA Award-winning *Sopra* speakers also introduced Focal's NIC motors (Neutral Inductance Circuit), which are again used in the Kanta N°2 to optimise the field within the magnet assemblies and enhance output from the bass drivers. Finally, the lower section of the cabinet also houses front and rear ports by way of tuning the bass response.

BAFFLE INNOVATIONS

Even the baffle design required an innovative approach, according to Focal. In order to reduce the volume of the bass cabinet without undermining performance, Focal's engineers developed a new form of inert, high-density polymer (HDP), which it claims is 70% denser than conventional MDF, as well as providing 25% greater damping and increased rigidity (a mere 15%). The smooth edges of the baffle are designed to reduce diffraction, while the angled profile – inspired by the *Utopia* and *Sopra* ranges

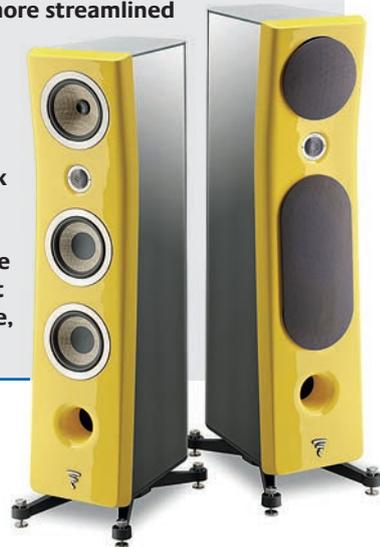
RIGHT: Focal's curved (time-aligned) baffle is fashioned from a high-density polymer and hosts two bass/mid and one dedicated mid driver with glass fibre/flax laminate cones. The inverted treble dome is a Focal beryllium unit

'It surely felt as though his world was spinning out of control'



FASHION STATEMENT

Focal's flagship Utopias may have garnered rave reviews for sound, but no-one would ever accuse them of being particularly elegant. So one of the company's aims with its new Kanta range was to come up with a more stylish design that appealed to both eyes and ears. As well as incorporating new materials for a more streamlined design, Focal has gone to town with its colour co-ordination options. The main cabinet is available in either high-gloss black or walnut wood veneer, and each can be married with its own selection of four different baffle colours. The gloss black cabinet can be paired with eye-catching Solar Yellow [inset picture], Gauloise Blue, Carrara White, or just a matching black. The walnut option provides a more subdued set of colours, including Ivory, Dark Grey, Taupe, as well as Gauloise Blue [main pictures].



– is intended to time-align the driver outputs. That attention to detail continues right down to the removable magnetic grilles, and the smooth glass panel that sits atop the speaker cabinet.

A more practical finishing touch is the Zamac (metal alloy) stand, with its adjustable spiked legs that ensure stability on almost any surface. Nevertheless, even with their time-aligned baffles, these new Focals are still somewhat picky about positioning and you'll need to dig out your slide-rule – or use the calculator app on your smartphone – to follow the mathematical equation provided for determining the optimal placement of your speakers!

BOWIE INSIGHTS

Thankfully your fine-tuning will be rewarded, as the Kanta N°2 does a good job of combining its more compact design with an attractive sound quality – and offering tremendous insight into the likes of the deep, sad tones of David Bowie's 'Blackstar' [*Blackstar*; ISO/Columbia 88875173871].

Initially auditioned in editor PM's listening room, there was a real sense of impending doom in Bowie's sonorous tones, yet the percussion sounded taut

and precise, with a whiplash crack like the ricochet of a bullet. The contrast between Bowie's mournful tones and the skittering percussion created a real sense of tension and unease, reflected in the Kanta N°2's

performance. At times the drums sounded positively manic, and as Bowie intones 'how many times does an angel fall?' it felt as though his world was spinning out of control (as, tragically, it proved to be so).

Turning to something a little more upbeat, the Kanta N°2 confidently balanced the changing moods and tempo of Björk's 'It's Oh So Quiet' [*Post*; One Little Indian TPLP51CDL]. There's a seductive lilting tone on the opening woodwind and the gently plucked double-bass, and Björk's softly whispering voice has a delicate warmth that is a world away from some of her more unearthly vocal gymnastics. But when the chorus kicks in, the Kanta N°2 knows that it's time to step up a gear, and the blaring horns and jangling piano swing with an authentic 1950's big band sound.

Focal's website frequently refers to the challenge of maintaining bass performance within the more restricted confines of the Kanta's compact cabinets, but the company's engineers have done well here. Listening to the remastered 2009 version of 'Come Together' by The Beatles [*Abbey Road*; EMI B0025KVLUQ] I was immediately struck by the famous sliding bass-guitar riff that opens the track. These initial notes were satisfyingly full and firm, grabbing my attention and pulling me into the song, before sliding smoothly along with a relaxed swing of the hips that made it hard to keeping sitting still.

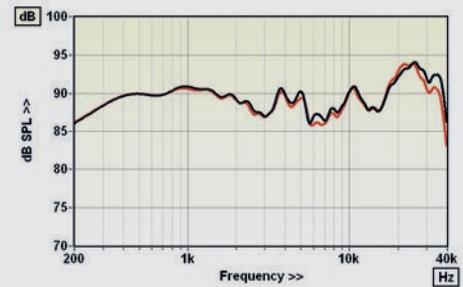
There's a nice contrast, too, between the delicacy of the bass and the heavier guitar chords that weigh in at the end ☺



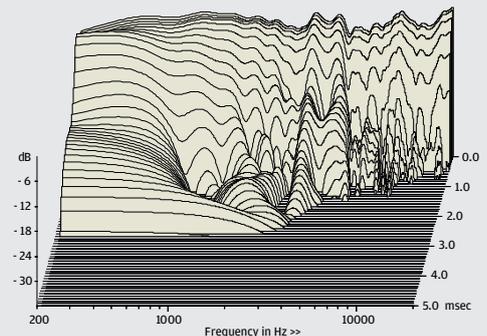
FOCAL KANTA N°2

Focal has a long history of making high-sensitivity floorstanding loudspeakers, some of which break the 90dB barrier to enter the rarefied atmosphere occupied by only the most sensitive direct-radiator designs. The Kanta N°2 claims to be part of that elite, with a specified sensitivity of 91dB, but that's not a figure verified by our measurements. Our pink noise figure is 89.3dB, or 89.1dB for a 'music spectrum' signal (both 300Hz-20kHz), so 89dB seems a more realistic figure. As we often see with Focal, this is in significant part achieved through low impedance. Focal's nominal figure of 8ohm sits uneasily with its specified minimum of 3.1ohm, and we actually measured slightly lower – 2.9ohm at 108Hz. Together with a large low frequency impedance phase angle, the low modulus contrives to reduce the minimum EPDR (equivalent peak dissipation resistance) to an extremely challenging 1.1ohm at 86Hz, so the Kanta N°2 demands an amplifier capable of delivering high current.

Forward frequency responses for the review pair, measured at 1m on the tweeter axis indicate a mild presence band dip and the treble ripples we've come to expect from recent new Focal models [see Graph 1, below]. Response errors are modest at ±3.1dB and ±3.5dB respectively; pair matching over the same 300Hz-20kHz frequency range is good at ±0.9dB and but for a narrow-band disparity between 4kHz and 5kHz would be ±0.7dB. Diffraction-corrected nearfield measurement shows bass extension to be 41Hz (-6dB re. 200Hz). The cumulative spectral decay waterfall [Graph 2, below] confirms that the treble response ripples are associated with a series of resonances, possibly modes associated with the flax/glass fibre mid driver. KH



ABOVE: The Kanta N°2's response shows a broad trough through the presence band and treble ripples



ABOVE: Cabinet is well damped but (midrange) driver resonances are visible through the treble at 4-6kHz

LEFT: Supplementary rear 'Power Flow' reflex port sits above single 4mm binding posts – no bi-wiring/amping possible here. Elegant alloy base plate includes spikes and ensures stability

processional pace. Enya's layered harmonies are smooth and detailed, and the sound floats lightly in the air immediately around and above the speakers, in typical Enya fashion. Yet that floating sound-cloud does seem quite static and lacking the boldness to spread further afield. Even moving just a little further back in the room, I clearly get the sense that I'm straying out of bounds and leaving Enya's atmospherics behind me.

SMALL SPACES

Of course, it's not unusual for speaker brands to emphasise precise positioning in order to achieve the best sound quality, but the scope here seems somewhat rigid and inflexible. Focal claims the Kanta N°2 is designed for rooms measuring up to 750ft² (60m²), but also adds that the speakers work best in smaller rooms of up to 320ft² (30m²).

Subsequent listening suggested that the latter figure is perhaps more realistic, as the speakers sounded terrific when I was in the sweet spot of a smaller space – and they would be great if you have a listening room or den that you can devote to them.

But while the tonal quality of the sound is hard to fault, the speakers should provide a greater sense of space in order to really 'own' the room – as you might expect at this price. But perhaps that's something Focal is saving for the yet-to-be announced Kanta N°3? ☹

HI-FI NEWS VERDICT

The sound here can feel a little constrained at times, and is perhaps better suited to bijou rooms where you can give the Kanta N°2s the attention they need. Yet that extra touch of style must surely attract users who have been intimidated by the visuals of Focal's earlier speakers. So it's mission accomplished for this new and more streamlined design that produces an insightful sound in 'real' spaces.

Sound Quality: 83%



of the chorus. Lennon's lead vocal could be a little more prominent, perhaps – it almost sounds as though he's singing from the rear of the stage, until the backing voices join in and add a little extra vocal weight. To be fair, it's a very natural sound that's not unlike listening to a live performance at home, yet it can still sound a little constrained at times, as though the Kanta N°2 is reluctant to let go and really reach out into the room.

It's a similar story with the widescreen production of Enya's 'The Humming' [Warner]. The quality of the sound is impeccable, with attractive warmth on the humming refrain, while the slow, insistent drumbeat gives the song a stately,

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83Vrms – Mean/IEC/Music)	89.2dB/89.3dB/89.1dB
Impedance modulus min/max (20Hz–20kHz)	2.9ohm @ 108Hz 50.8ohm @ 26Hz
Impedance phase min/max (20Hz–20kHz)	-74° @ 64Hz 49° @ 21Hz
Pair matching/Response Error (300Hz–20kHz)	±0.9dB/ ±3.1dB/±3.5dB
LF/HF extension (-6dB ref 200Hz/10kHz)	41Hz / >40kHz/>40kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.1% / 0.2% / 0.1%
Dimensions (HWD)	1118x321x477mm