



Bijou baby

The most affordable and diminutive model in B&W's new 800 Series sports a host of improvements

PRODUCT B&W 805S

TYPE Standmount loudspeaker

PRICE £1,600 per pair

KEY FEATURES Size (WxHxD): 24x42x35cm
• Weight: 11.5kg • Bass/midrange driver: 120mm Kevlar cone with 165mm cast chassis • Tube-loaded 25mm metal tweeter in decoupled external pod • Front 'Flowport' has shaping and stippling to aid airflow
• Enclosure back is formed into a single elegant curve
• Sensitivity/impedance: 89dB/5 ohms (minimum)

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This speaker might look very familiar. From across the room, you'd be hard pushed to tell the difference between this new B&W 805S and its Nautilus 805 predecessor. There are minor visible changes – in the grille treatment, the top surface, the location of the tweeter and the centre of the main drive unit cone – but they're only really detectable by carefully scrutinising the old and the new side by side.

It's a commercially brave move to come up with a new range of models that look virtually the same as their predecessors, especially as it's a full seven years since those earlier Nautilus 800 models first appeared. Most brands use a range change as an opportunity to restyle products, attracting attention to the new models and keeping abreast of fashion trends. B&W's decision to make the new 800s look just like the old Nautilus 800s is perhaps



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a risky stratagem, but also speaks of the company's self-confidence in its designs, which essentially hold to a form-follows-function agenda. Good design doesn't age.

Despite the very similar appearance, B&W reckons that roughly 90 per cent of the components in the new 800 Series models, which began to hit the shops at the start of 2005, are different from those used in the old Nautilus 800 range. It's just that nearly all the changes are well hidden, and specifically oriented towards improving the performance and sound quality.

Furthermore, halfway between the launch of the previous Nautilus 800 range and the appearance of these new 800s, B&W added three interim models to the line-up – two new 'flagships', plus a Signature 805. The latter was based closely on the Nautilus 805, but featured a number of engineering improvements, including a 'Balanced Drive' motor, as well as a very classy figured veneer with multi-layer, high-gloss lacquering, the combination of superior performance and appearance resulting in a hefty £2,500 price tag. Not only have the engineering improvements incorporated in the Signature 805 been applied to this 805S, but further development work has apparently taken the


performance up several notches higher still. The promise is that the 805S will not only outperform the Nautilus 805, but also the Signature 805, albeit without the latter's fancy cabinetwork and price tag.

This new 805S costs £1,600 per pair, which is £200 more than its predecessor – but a 15 per cent increase after a seven year gap doesn't seem unreasonable, especially if significant performance improvements come as part of the package.

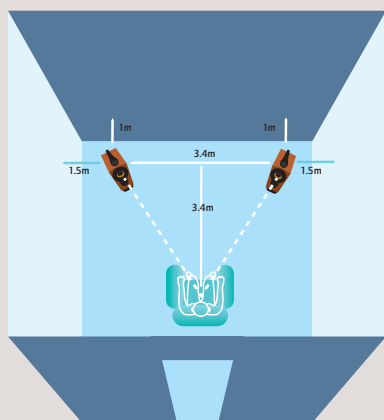
The new 800 Series is an extensive range, comprising seven stereo pairs priced from £1,600 up to £13,000 per pair, alongside nine home cinema models (including three subwoofers). Among the stereo pairs there are three less expensive S-suffixed models, plus four more costly D-suffixed examples, the distinction referring to the type of material used for the tweeter diaphragms. The S-type model reviewed here uses a traditional aluminium alloy dome, while the D-types have a dome fabricated (with great difficulty and at great cost) from vapour-deposited synthetic diamond, which has much greater stiffness and therefore a much higher break-up point (74kHz, compared to 29kHz for the ally).

This 805S is the smallest and least costly of the new 800s. It's also the only two-way and

the only standmount. If the strikingly curvaceous styling is no longer novel, it's still undeniably attractive and likely to remain a major selling point. The curved cabinetwork avoids the parallel sides found with many conventional loudspeakers and consequently avoids the frequency-specific internal box modes that a rectilinear shape tends to generate. The front panel, housing the main driver and port, is flat, but the sides and back are made up by a single, carefully bent piece of veneered plywood laminate. This is already inherently very stiff, and is reinforced by an internal 'honeycomb' matrix that further braces the box in many places and every direction. Even the top surface is gently domed, to the benefit of both styling and performance.

It's a classic compact two-way standmount in outline, with an estimated enclosure volume of around 11 litres, port-loaded at the front by B&W's proprietary flared and stippled Flowport to minimise turbulence. Because this is a two-way design, the main driver here combines midrange duties with the requirement to cover the cone excursion needed to deliver the bass octaves, so there's no opportunity here to use the 'surroundless' FST midrange driver found in the three-way models. Instead, B&W is using a considerably refined version of its familiar 

SET-UP



POSITIONING

The Signature 805 we tested in *HFC* 232 proved extremely tricky to position in order to achieve the best overall balance through the bass octaves. The dilemma was that the speaker seemed to need the extra bass assistance that is invariably supplied by wall proximity, but that in turn had the disadvantage of increasing the level of midband coloration, making free space more attractive.

The 805S seems to have avoided that difficulty by opting for a different bass alignment. By re-tuning the port to 50Hz rather than 42Hz, the 805S sacrifices a little in terms of ultimate extension in exchange for rather more mid-bass output, and as a consequence this new model proved altogether better aligned for free space sitting, well clear of walls.

This was confirmed by the in-room measurements. With the speakers mounted on 600mm stands, a number of traces were made at various distances out from the wall, and best results were found with the front baffles about 1m out from the wall. Under such circumstances, the overall balance (under far-field in-room conditions) was a little mid-forward (200-800Hz), gently rolling off below 200Hz but comfortable maintaining acceptable bass output down to 40Hz. The top end above 800Hz also rolled off very gently and quite smoothly, albeit with a slight presence notch centred on 3kHz, around the crossover point. Foam bungs were supplied, and these are likely to be useful in situations where the speaker has to be placed close to a wall, though listening comparisons showed that this was better avoided. Although the overall balance is not strictly neutral, it is very well controlled.

SYSTEM MATCHING

One of the virtues of a simple two-way design is that the crossover network required is equally simple. Because there's little overlap between the drivers, the impedance stays at a respectable figure throughout. The average value recorded here is above eight ohms, with minima of around five ohms occurring at 50Hz, 200Hz and 20kHz. The current demands made on the driving amplifier should be reasonably modest, especially as the sensitivity is a healthy enough 88-89dB. This means the speaker will go decently loud without in any way stressing the amp.



■ 165mm cast frame main driver, equipped with a 120mm woven Kevlar/polymer cone. The magnetic motor features the latest 'Balanced Drive' metalwork to minimise distortion, and a larger magnet than before, while magnetic shielding is no longer used here. A bullet-shaped phase-compensating dust dome covers the voice coil, and is now part of the cone rather than the pole piece, increasing the radiating area and avoiding chuffing sounds.

The 25mm aluminium alloy dome tweeter is mounted externally on top of the enclosure proper, to provide the smallest possible source and hence the widest radiating 'window'. The tapered tube shape acts as a transmission line to absorb (rather than reflect) the rearward output radiated behind the tweeter dome. Although the current tweeter and pod look very like their predecessors, a number of changes have taken place. Most significantly, the dome's surround has been changed, from a foam to a polymer roll. This lowers its fundamental resonance, which in turn allows for a much gentler, simpler crossover filter. Other factors include relocating the tube to take account of the new crossover network, and increasing the degree of lossy decoupling from the main enclosure.

The crossover change is regarded as sonically highly significant. Somewhat belatedly, B&W has recognised the virtue of keeping crossover networks as simple as possible, and all the new 800 Series models feature ultra-simple first-order tweeter feeds. The 805S, like the rest of the new range, has just a single capacitor providing a 6dB/octave roll-on, plus a resistor

to set the relative level. Very great care went into sourcing this capacitor, which is a costly item from German company Mundorf. Finally, twin terminal pairs permit bi-wire or bi-amp operation if desired.

SOUND QUALITY

Both the Nautilus 805 and Signature 805 have performed very well in past *Hi-Fi Choice* reviews, so it was hardly a surprise to find that the 805S also delivers very fine sound quality. Rather than simply describing the sound of this new model in isolation, however, it seemed much more useful to get hold of those earlier models to provide a proper context for the review, and establish just how the various 805 models have evolved, sonically speaking.

The 805S is the direct replacement for 1997's Nautilus 805, and does indeed represent a major step forward. Though the Nautilus 805 remains a decent enough speaker, it also sounds a little 'small' and 'ordinary'. It's somewhat constrained, even constipated in comparison, lacking genuine freedom of dynamic expression, and not really possessing the sweetness and delicacy that the later versions supplied.

The Signature version of the 805 sounds altogether more special than its Nautilus predecessor. Its performance is more coherent, with a tautness, pace and expression that had simply eluded the base model, and a sweeter top end too. Musically-speaking, the net result is simply more enjoyable and communicative.

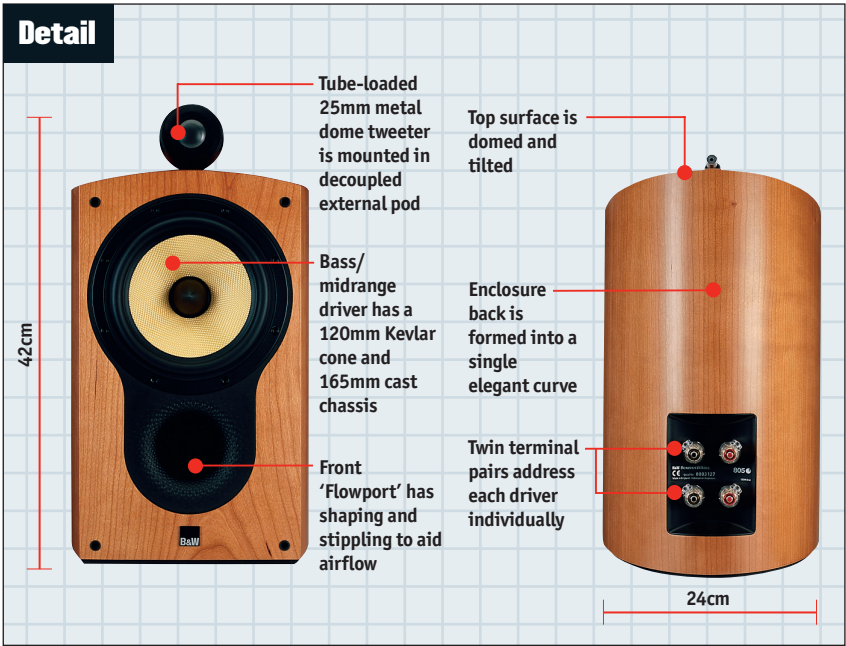
First impressions of the new 805S were that it was certainly as good as the Signature, and different from that model too, but not

necessarily significantly superior. Overall coherence seemed even better, and the bass end was firmer and more purposeful too, but midband dynamic expression seemed a little weaker. However, the 805S had had very little running-in time when the comparison was first made. After a couple of days hard use, the exercise was repeated, and the superiority of the new model was now apparent.

Indeed, the 805S seemed to have blossomed through this running-in period, and although the Signature model was still very enjoyable, it also sounded a little crude and coloured by comparison. The 805S still sounded more restrained, dynamically speaking, but it was also altogether smoother, sweeter, more neutral, and ultimately more natural than the Signature in its reproduction of all manner of music and speech.

The latter, in fact, clinched the matter. One of each speaker was placed side by side on identical 600mm Kudos S100 stands. Using Vertex AQ speaker cables from a Naim NAP 500 power amp, one was connected to the left channel, the other to the right. The Magnum Dynalab MD 102 was set to Radio 4, where Laurie Taylor was introducing *Thinking Aloud*. The Naim NAC 552 pre-amplifier was set to mono mode and the two speakers were compared by simply swinging the balance control between extreme left and right settings, probably the nearest thing to an audiophile switching box you can get.

Mono comparison is actually a very powerful tool for analysing differences in midband and treble performance, probably because it removes the distraction of stereo imaging (it shouldn't be used to assess bass balance, however, because of the way the output of two well-spaced speakers adds up to rather more than either when played singly). High-quality



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speech is also very revealing when drawing comparisons, presumably because we are so familiar with the real thing in everyday life.

Careful measurements confirmed that the Signature 805 and 805S had almost identical frequency balances above 100Hz, with just a minor discrepancy in bass alignments. But, on this stringent speech test, the differences between the two models were obvious. Better still, they were entirely in favour of the new 805S. The new model sounded clearer and more coherent with better total integration, less boxiness and shouty coloration, and a significantly sweeter top end. Although the overall sound errs a little on the side of

laid-back restraint, it also seemed clearer and more open than earlier B&Ws when playing at low listening levels.

Back in stereo mode, the B&W’s superior delicacy and freedom from boxiness continued to impress mightily. Massive, powerful bass drive isn’t on the agenda here, of course, but neither is it all that essential much of the time and on much day to day material. Extra bass authority would be handy on some occasions, for sure, but the capabilities of a top class stand-mount such as this, with its delightful freedom from any heaviness and thickening effects, is not to be underestimated. This

speaker’s spacious imaging and lightness of touch is utterly delightful, and the sound is notably free from unwanted nasties.

Perhaps the most telling reaction to this speaker was my partner’s behaviour. I was spinning an old favourite – Lowell George’s solo album *Thanks I’ll Eat it Here*, only to find this extra voice joining in. She also showed an alarming tendency to start dancing on entering the room whilst the 805S was playing. This doesn’t normally happen!

The upshot is that B&W has managed to advance the art of music reproduction from this high-class standpoint by several notches, without seeming to change very much at all on the surface. Sneaky stuff – and sonically very impressive too. **HFC**

Paul Messenger



VERDICT	
SOUND >> 92% [Progress bar]	PRO B&W’s latest 805S goes several steps beyond its Nautilus predecessor. This delightful little speaker makes you want to tap your feet and sing along.
EASE OF DRIVE >> 85% [Progress bar]	CON A bit more grunt and scale would be an advantage, as the sound lacks a little warmth and richness. Don’t damage the tweeter domes.
BUILD >> 93% [Progress bar]	
VALUE >> 89% [Progress bar]	
CONCLUSION Numerous changes under the skin have substantially improved this upmarket stand-mount. The result is a communicative and entertaining speaker, with great subtlety and delicacy, despite some lack of bass weight, authority and tonal richness.	
HI-FI CHOICE OVERALL SCORE >> 91%	