Bowers & Wilkins

800 Series Diamond









This is not just another speaker range. Each new generation of 800 Series Diamond[™] is a landmark event for Bowers & Wilkins. This is our benchmark, our icon; the most advanced range of loudspeakers we know how to make. For us, the 800 Series Diamond is everything we know, and everything we are.

Excellence. Evolved.

A legacy like no other.

Other loudspeakers merely replay recorded music. 800 Series Diamond makes it. The monitor speaker of choice for recording industry professionals for decades, it has helped artists, composers and studios the world over to create the music and film soundtracks that have shaped a generation.





Our design always has a purpose. Decades of advanced research into the acoustic and mechanical fundamentals of loudspeaker cabinets have endowed us with a deep understanding of how to make them sound wonderful. And if that same knowledge also inspires beautiful forms, who's complaining?

Form meets function.

The science of sound.

Innovation is at the heart of everything we do. We question, we examine, we understand and then we evolve. We use computer modelling to explore and reimagine every aspect of loudspeaker design in our quest to deliver True Sound. And this time around, we think we've got closer than ever.



Product range



We want everyone to hear music the way we do, as the artist intended. Whether you're a studio engineer or a home audio enthusiast, you'll find an 800 Series Diamond model to suit your listening requirements, including both stereo and home theatre. Introducing the world's most advanced loudspeaker range.

The loudspeaker that sets the standard all high-end designs will be judged by for years to come. Endowed with every new technology the 800 Series Diamond has to offer, the reference-quality 801 D4 also marks the return to our portfolio of one of our most iconic model names.





Built to similar proportions as the flagship 801 D4, the 802 D4 offers much of the performance of its sibling, including the same Turbine[™] Head enclosure for its midrange drive unit, yet is a more affordable design overall. Perfect for reference-grade stereo listening and also an excellent choice in home theatre applications.

Our most compact headed model brings all of the technical advantages of a dedicated midrange enclosure – the iconic Turbine Head – to a smaller footprint that's easily accommodated in any home. Small doesn't mean compromised, either: 803 D4 still bristles with technical innovation throughout.







For listeners who prefer a more conventional aesthetic but crave the performance of an 800 Series Diamond loudspeaker, the 804 D4 is the perfect choice. Its new reverse-wrap cabinet follows the proven design principles established by its larger siblings and its new plinth ensures rock-solid, accurate bass response too.

The 805 D4 standmount loudspeaker is the most compact model in the 800 Series Diamond range, but it's still packed with advanced technologies, including that all-important Diamond dome tweeter and Solid Body Tweeter-on-Top. It's proof positive that small can still be beautiful.



Centre channels



HTM81 D4 Our largest centre-channel speaker is designed to be the perfect partner for the 801 D4 and 802 D4. Small wonder, then, that it's such a powerful performer, with sound that perfectly matches the quality of its illustrious stablemates. Available with an optional matching floorstand for the perfect installation.



HTM82 D4 For Theatre systems based on the more compact 803 D4 or 804 D4, the HTM82 D4 centre channel speaker is the perfect solution. Its midrange drive unit is ideally sized to match its siblings and its ample output will ensure a seamless listening experience. Available with an optional matching floorstand.

Technologies



Everything matters in loudspeaker design. And if you're trying to make the best range of loudspeakers there is, everything matters just that little bit more. That's why we design, 800 Series Diamond loudspeaker as we possibly can. When excellence is your aim, nothing less than the best will do.

Turbine Head Hear the sound, not the cabinet. We've used separate midrange enclosures on 800 Series models from the very beginning: now, our all-aluminium Turbine Head housing takes the concept to the next level. This phenomenally stiff and inert housing for the crucial midrange cone is carefully damped to avoid unwanted resonances and decoupled from both the bass enclosure and the tweeter body. The result? The most realistic midrange sound yet.





Solid Body Tweeter The latest incarnation of our iconic Solid Body Tweeter-on-Top housing features an elongated form with a longer tube-loading system, producing an even more free and open sound with high frequencies. As before, the carefully decoupled housing is milled from a single solid block of aluminium to better resist resonance.



Reverse wrap cabinet When it came to designing the ideal shape for the 800 Series Diamond cabinet, we did a U-turn. Quite literally. Instead of a flat-fronted speaker with a curving back, we produced a cabinet with a front and sides formed of one continuous curve, held together with a spine of solid aluminium. Fewer joins make for a stiffer, more inert structure, and a curved front means less baffling around the drive units. So sound dispersion is improved, and cabinet reflection is reduced.

Matrix[™] Matrix bracing uses interlocking panels to reinforce loudspeaker cabinet walls in all directions internally, reducing resonance and creating a more believable soundstage. Every loudspeaker in the new 800 Series Diamond benefits from an upgraded Matrix design that combines solid plywood construction with aluminium bracing to reinforce key stress points.



Biomimetic Suspension Sometimes, making a big difference takes unconventional thinking. For decades, we thought nothing could improve on the sound of our famous yellow Aramid Fibre midrange cones, but eventually our Continuum[™] cone technology changed our minds. Now, we've turned our attention to another crucial element in a loudspeaker cone: the fabric spider. Our all-new Biomimetic Suspension revolutionises midrange cone performance by greatly reducing the unwanted air pressure and coloration that a conventional fabric spider can generate. The result? Midrange transparency you wouldn't believe possible.







Decoupled midrange Every 800 Series Diamond loudspeaker apart from the standmount 805 D4 has a dedicated midrange cone using several proprietary Bowers & Wilkins technologies: the Continuum FST cone, Biomimetic Suspension and midrange decoupling, the latter ensuring minimal interference from the operation of the loudspeaker's bass units.

Aluminium top plate Every stereo model in the new 800 Series Diamond range has a significantly upgraded cabinet design with an all-new aluminium top plate for even greater stiffness and as a result, even more realism. The same design also provides a perfect mounting point for all-new Leather by Connolly cabinet detailing.





Renowed globally for its character and quality, Leather by Connolly is found in the cabins of some of the world's most prestigious cars. We offer luxurious black leather for dark cabinets and light grey for lighter finishes.



Rear-mounted crossover All stereo models in the new 800 Series Diamond range now use rear-mounted crossover designs mounted on stiff aluminium spines. This isolates the sensitive capacitors from the unwanted effects of air pressure within the enclosure and makes for a very effective heatsink to ensure optimum performance when in use.

Finishes





Satin Walnut

Gloss Black

Satin Rosenut

Everything we do, we do with passion. That includes not just designing and engineering our 800 Series Diamond loudspeakers, but making them. Assembled with lavish attention to detail by skilled workers in our UK factory, the new range is available in four finishes: Gloss Black, Satin Rosenut, Satin Walnut and White.



Specifications

	801 D4	802 D4	803 D4	804 D4	805 D4
Technical features	Diamond tweeter Solid body Tweeter-on-Top Continuum [™] cone FST Anti-Resonance plug Biomimetic Suspension Turbine [™] Head Matrix [™] Aerofoil [™] cone bass units Flowport	Diamond tweeter Solid body Tweeter-on-Top Continuum [™] cone FST Anti-Resonance plug Biomimetic Suspension Turbine [™] Head Matrix [™] Aerofoil [™] cone bass units Flowport	Diamond tweeter Solid body Tweeter-on-Top Continuum [™] cone FST Anti-Resonance plug Biomimetic Suspension Turbine [™] Head Matrix [™] Aerofoil [™] cone bass units Flowport	Diamond tweeter Solid body Tweeter-on-Top Continuum [™] cone FST Anti-Resonance plug Biomimetic Suspension Matrix [™] Aerofoil [™] cone bass units Flowport	Diamond tweeter Solid body Tweeter-on-Top Continuum™ cone bass/mid Anti-Resonance plug Matrix™ Flowport
Description	3-way vented-box system	3-way vented-box system	3-way vented-box system	3-way vented-box system	2-way vented-box system
Drive units	1x ø25mm (1in) diamond dome high-frequency 1x ø150mm (6in) Continuum cone FST midrange 2x ø250mm (10in) Aerofoil cone bass units	1x ø25mm (1in) diamond dome high-frequency 1x ø150mm (6in) Continuum cone FST midrange 2x ø200mm (8in) Aerofoil cone bass units	1x ø25mm (1in) diamond dome high-frequency 1x ø130mm (5in) Continuum cone FST midrange 2x ø180mm (7in) Aerofoil cone bass units	1x ø25mm (1in) diamond dome high-frequency 1x ø130mm (5in) Continuum cone FST midrange 2x ø165mm (6.5in) Aerofoil cone bass units	1x ø25mm (1in) diamond dome high-frequency 1x ø165mm (6.5in) Continuum cone bass midrange
Frequency range	13Hz to 35kHz	14Hz to 35kHz	16Hz to 35kHz	20Hz to 35kHz	34Hz to 35kHz
Frequency response (+/-3dB from reference axis)	15Hz to 28kHz	17Hz to 28kHz	19Hz to 28kHz	24Hz to 28kHz	42Hz to 28kHz
Sensitivity (on axis at 2.83Vrms at 1m)	90dB	90dB	90dB	89dB	88dB
Harmonic distortion	2nd and 3rd harmonics (90dB,1m on axis) <1% 30Hz – 20kHz <0.3% 100Hz – 20kHz	2nd and 3rd harmonics (90dB, 1m on axis) <1 % 70Hz – 20kHz <0.3% 100Hz – 20kHz	2nd and 3rd harmonics (90dB, 1m on axis) <1 % 80Hz – 20kHz <0.3% 100Hz – 20kHz	2nd and 3rd harmonics (90dB, 1m on axis) <1 % 90Hz – 20kHz <0.3% 120Hz – 20kHz	2nd and 3rd harmonics (90dB, 1m on axis) <1 % 90Hz – 20kHz <0.3% 120Hz – 20kHz
Nominal impedance	8Ω (minimum 3.0Ω)	8Ω (minimum 3.0Ω)	8Ω (minimum 3.0Ω)	8Ω (minimum 3.0Ω)	8Ω (minimum 4.6Ω)
Recommended amplifier power	$50W - 1000W$ into 8Ω on unclipped programme	50W – 500W into 8Ω on unclipped programme	50W – 500W into 8Ω on unclipped programme	50W – 200W into 8Ω on unclipped programme	50W – 120W into 8Ω on unclipped programme
Max. recommended cable impedance	0.1Ω	0.1Ω	0.1Ω	0.1Ω	0.1Ω
Dimensions	Height: 1221mm Width: 451mm Depth: 600mm	Height: 1218mm Width: 413mm Depth: 602mm	Height: 1165mm Width: 357mm Depth: 511mm	Height: 1071mm Width: 306mm Depth: 391mm	Height: 440mm Width: 240mm Depth: 373mm
Net weight	100.60kg	88.10kg	62.15kg	36.85kg	15.55kg
Finishes	Cabinet: Grille: Gloss Black Black White Grey Satin Rosenut Black Satin Walnut Grey	Cabinet:Grille:Gloss BlackBlackWhiteGreySatin RosenutBlackSatin WalnutGrey	Cabinet:Grille:Gloss BlackBlackWhiteGreySatin RosenutBlackSatin WalnutGrey	Cabinet:Grille:Gloss BlackBlackWhiteGreySatin RosenutBlackSatin WalnutGrey	Cabinet: Grille: Gloss Black Black White Grey Satin Rosenut Black Satin Walnut Grey













HTM81 D4

Diamond tweeter Solid body Tweeter-on-Top Continuum™ cone FST Anti-Resonance plug Biomimetic Suspension Matrix™ Aerofoil™ cone bass units Flowport

3-way vented-box system

1x ø25mm (1in) diamond dome high-frequency
1x ø150mm (6in) Continuum cone FST midrange
2x ø200mm (8in) Aerofoil cone bass units

20Hz to 35kHz

28Hz to 28kHz

90dB

2nd and 3rd harmonics (90dB, 1m on axis) <1 % 80Hz – 20kHz <0.3% 100Hz – 20kHz

 8Ω (minimum 3.0Ω)

50W-500W into 8Ω on unclipped programme

0.1Ω

Height:	334mm
Width:	847mm
Depth:	371mm

32.20kg

Cabinet:	Grille:
Gloss Black	Black
White	Grey

HTM82 D4

Diamond tweeter Solid body Tweeter-on-Top Continuum™ cone FST Anti-Resonance plug Biomimetic Suspension Matrix™ Aerofoil™ cone bass units Flowport

3-way vented-box system

1x ø25mm (1in) diamond dome high-frequency 1x ø130mm (5in) Continuum cone FST midrange 2x ø165mm (6.5in) Aerofoil cone bass units

33Hz to 35kHz

45Hz to 28kHz

89dB

2nd and 3rd harmonics (90dB, 1m on axis) <1 % 100Hz – 20kHz <0.4% 100Hz – 20kHz

 8Ω (minimum 3.0Ω)

50W – 200W into 8Ω on unclipped programme

0.1Ω

Height:	289mm
Width:	715mm
Depth:	369mm

25.15kg

Cabinet:	Grille:
Gloss Black	Black
White	Grey







Bowers & Wilkins

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