

Bowers & Wilkins

600 Series





Performance, power, price The 600 Series continues the award-winning promise of its predecessors – the audio performance you demand from Bowers & Wilkins, power to fill any room, yet at a budget that allows everyone access to true, audiophile sound. It adopts technologies from our premium speakers plus innovations and engineering solutions unique to the range. Bowers & Wilkins believes everyone should be able to experience truly great sound. With the new 600 Series, everyone can.

How does the new 600 Series raise the bar for entry-level audiophile speakers? By bringing in hard-learned technologies from Bowers & Wilkins high-end speakers. Double dome tweeters, found only in the CM10 until now, join FST™ midrange drive units used in all our premium models plus energy-absorbing foam Anti-Resonance Plugs derived from the PM1. And the new 600 Series doesn't just incorporate existing technologies. It adds some new ones of its own, including – for the first time in a cabinet loudspeaker – the use of decoupled tweeters that float in a gel cushion, separate from the cabinet around them. Bass drivers are improved too, stiffened with an extra bracing ring of aluminium to deliver a higher break-up frequency. Technologies purpose-designed to deliver maximum performance for minimum cost meet existing technologies brought in from high-end speakers; the result is amazing performance and power at an even more amazing price. The new 600 Series: the high-end speakers for everyone.

For the love of music It doesn't matter where your music comes from. You might personally prefer classic vinyl, lossless FLAC files or Spotify streams. What really matters is how good the music sounds to you. And in a world of streaming, wireless and cloud-based audio, in a world where music has to compete with everything else happening in your life, it matters more than ever that music sounds brilliant. After all, what else can soothe you to sleep, excite and invigorate you, or clear and calm your head to let you think and feel? Cut through the chatter, sit back and really listen... and you'll see.







683 The largest speaker in the new 600 Series delivers outstanding power, accuracy and musicality. The floorstander features the new Decoupled Double Dome tweeter, an FST midrange driver and new Dual Layer aluminium bass drivers. The result is a loudspeaker ideal for both high-performance stereo and surround sound applications even in larger rooms, delivering serious performance and amazing value.

Serious and accurate bass performance is vital to such a room-filling speaker. That's why the 683 features an all-new bass drive unit technology: its Dual Layer aluminium drive units are reinforced around their periphery with a second layer of aluminium. The result is a more effectively damped cone with a higher break-up frequency for a richer, distortion-free bass response. The 683 also boasts a Decoupled Double Dome tweeter and an FST Kevlar® midrange unit. Serious technology, serious performance, but seriously affordable for a speaker of this calibre.



684 Room-filling sound without a room-filling speaker cabinet. Slimmer than ever, the 684 offers an amazing combination of serious floorstander power, spectacular audio performance and unbeatable value thanks to its new and vastly improved bass/midrange drivers and the Decoupled Double Dome tweeter.

Switching to 5-inch drivers from the previous 6.5-inch designs means the new 684 is significantly slimmer than its predecessor, yet Bowers & Wilkins engineers have still improved its audio performance. The two Kevlar-cone drivers now feature smaller voice coils to increase sensitivity. The 5-inch drivers now also feature Anti-Resonance Plugs that improve the behaviour of the voice coil and smooth response, a technology taken from our high-end PM1 speakers. The result is a breathtaking performance from a modestly proportioned loudspeaker.



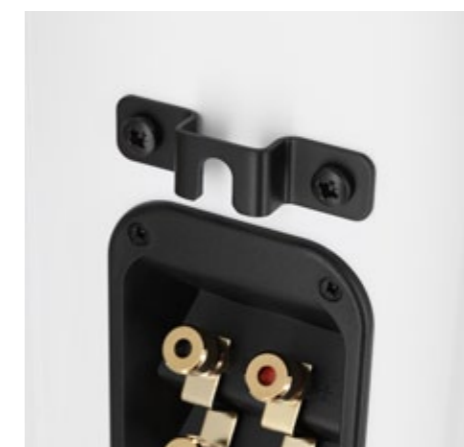
685 At home on either a stand or bookshelf, the versatile new 685 delivers outstanding performance. Perfectly sized for most rooms, it combines new Decoupled Double Dome tweeters, Kevlar cones and Anti-Resonance Plugs, with the value for which the 600 Series is renowned.

The Decoupled Double Dome tweeter found in the 685 – and the rest of the new 600 Series – is a technology taken straight from our award-winning CM10 speaker. The dual-layer design combines a thin aluminium dome for lightness and a thicker aluminium ring for rigidity. The result is absolutely stunning clarity and tonal purity.

The tweeter is also decoupled from the main cabinet, kept physically separate in its own cavity with a ring of gel cushioning it from vibrations. This improves imaging and dispersion for a more natural, spacious treble.



686 Small is beautiful – at just 160mm wide, the 686 may be the most compact speaker in the new 600 Series, but don't underestimate its power and precision. That's thanks to its new Decoupled Double Dome tweeter, improved Kevlar driver and front-facing Flowport™.



An ideal bookshelf or wall-mounted speaker, the 686 is designed to fit into any space and still sound perfect. Its main 5-inch driver features a 25mm voice coil which makes for a higher sensitivity speaker with bass more suited for placement near a wall. A front-firing Flowport, dimpled like a golf ball around the aperture for smoothly regulated airflow, delivers superior bass response without the risk of rattle. And its placement ensures the speaker cabinet can be slimmer than before.

The 686 even features a built-in bracket for easy wall mounting, but this small, versatile and precise speaker sounds great anywhere.

Home theatre packages The new 600 Series is ideal for audiophile stereo listening, but speakers from the range can be teamed together for a stunning home theatre experience. With two floorstanding, two standmount, two centre speakers and three subwoofers to choose from, the new 600 Series can fill the largest space... or fit in the smallest.

The stereo and centre channel speakers in the new 600 Series now feature improved Decoupled Double Dome tweeter designs, ideal for delivering the clarity needed for dialogue. For midrange and bass drivers, Kevlar, Anti-Resonance Plugs and FST drive unit technology plus aluminium cones ensure stunning power and clarity.

Bowers & Wilkins has prepared two suggested home theatre speaker packages based on the new 600 Series, each designed to perfectly complement different room sizes, needs and budgets. Both sound simply stunning for big-screen action.



Centre & Surround The new 600 Series' HTM62 and HTM61 centre speakers look great thanks to a slimmer cabinet and new, more symmetrical design, respectively. They also sound better than ever. Both models feature the new Decoupled Double Dome tweeter, with the HTM61 sporting two powerful 6.5-inch bass drivers and an FST midrange driver for a perfect match with the mighty 683 floorstanders.



Subwoofers The 600 Series includes three subwoofers, ranging from the compact ASW608 to the powerful ASW610XP. Each boasts an audiophile-standard, highly efficient Class D amplifier. And each has updated finishes to ensure a perfect match with the rest of the new 600 Series.



Treble The new 600 Series borrows technology from the award-winning high-end CM10, in the form of the Decoupled Double Dome tweeter. As a result it captures musical subtleties with breathtaking accuracy and delivers a natural, spacious sound unprecedented for such an affordable speaker.

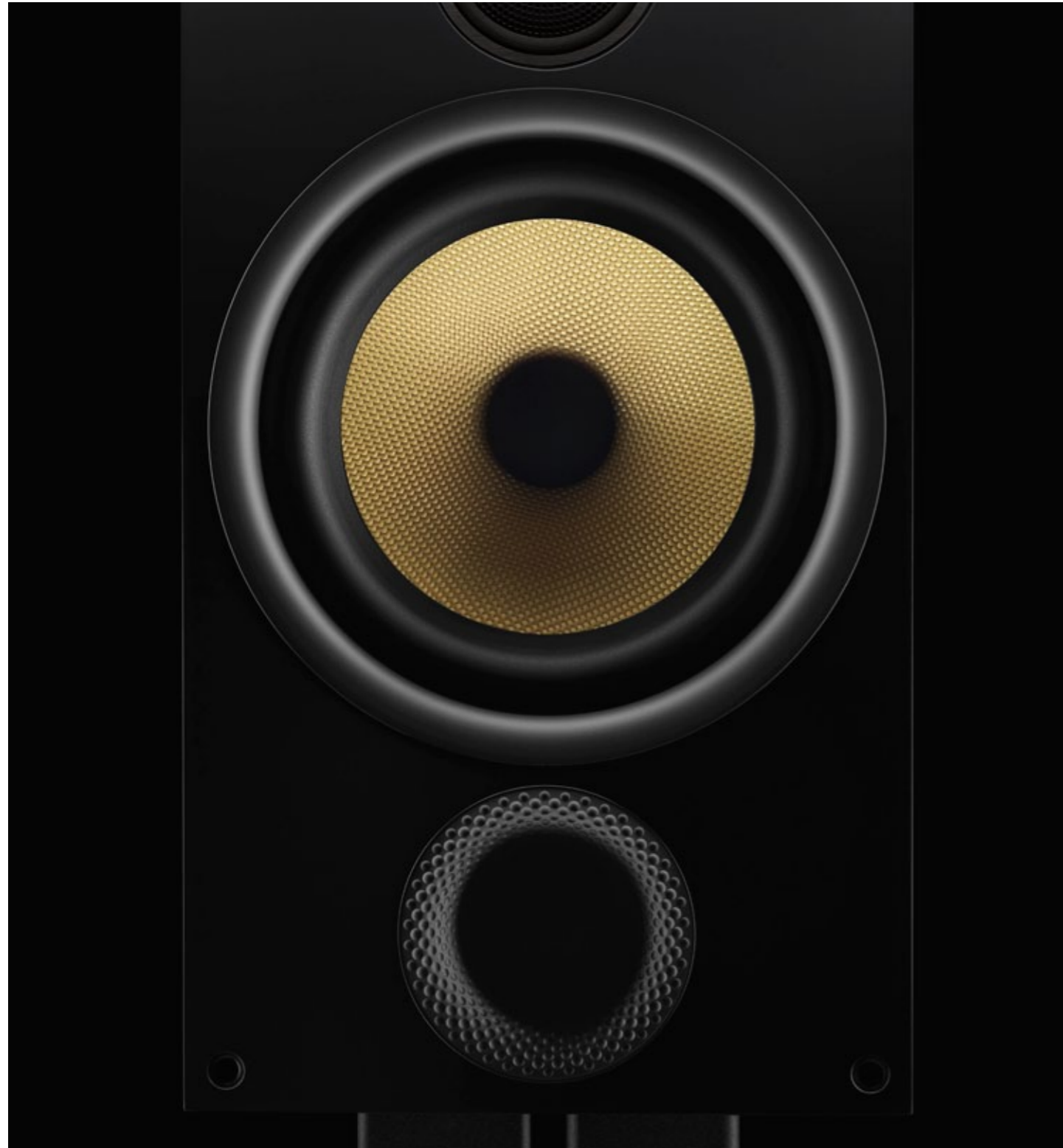


When designing a tweeter, the goal is to make the diaphragm light yet stiff to reproduce high notes accurately with a pistonic back-and-forth motion and minimal distortion. The 600 Series does this beautifully, borrowing high-end tweeter technology from Bowers & Wilkins award-winning CM10 speaker. Its double dome design uses an extremely thin aluminium dome for lightness, surrounded by a thicker aluminium ring for rigidity; these combine to stop the voice coil from distorting. The result is a treble performance so pure and precise it will take your breath away.



While the tweeter looks like it's completely integrated into the cabinet of each speaker in the 600 Series, it's actually kept physically isolated from the enclosure that surrounds it. The tweeter sits in a ring of gel that acoustically decouples it from its housing, so performance isn't hit by unwanted resonances and vibrations. Imaging and dispersion are improved, delivering a more natural, spacious sound.

Midrange How to improve on the stunning performance of the 600 Series without affecting its legendary value? That was the challenge faced by Bowers & Wilkins engineering team on the new Series 600 midrange drivers. The results are fantastic.



FST

Our signature 'Fixed Suspension Transducer' drivers help Kevlar cones perform even better. The edge of the cone is mounted in a narrow ring of foam. Narrow so that when it moves it radiates as little sound as possible. And foam carefully chosen to convert unwanted energy into heat, not sound. This 'surroundless' suspension minimises distortion and gives the cleanest midrange performance in the business.

The same properties that allow Kevlar to stop a bullet also make it the ideal material for soaking up standing waves in a speaker cone that can colour and distort midrange sound. Not only does Kevlar deliver a far cleaner sound, it can do so to a more widely dispersed group of listeners.

The new 600 Series midrange drivers feature our unique and iconic Kevlar cones as a matter of course, but continued research allows the drivers in the new 600 Series to deliver even lower distortion levels, while smaller voice coils in the 5-inch drivers further increase sensitivity.

The bass/midrange drivers in the new 600 Series speakers also benefit from the introduction of Anti-Resonance Plugs, first seen in the PM1. These mushroom-shaped dustcaps reduce higher-frequency break-up by ensuring better piston movement inside the voice coil.

Add in the revolutionary FST™ drive unit on the 683 and HTM61 and the result is that midrange performance is vastly improved on every model in the range – yet without affecting the incredible value the 600 Series is renowned for.

Bass The new, slimmer 600 Series speakers are designed to not dominate the design of any room. But they are designed to sonically dominate – with luxurious and clear bass response delivered using the latest technologies, testing and materials.

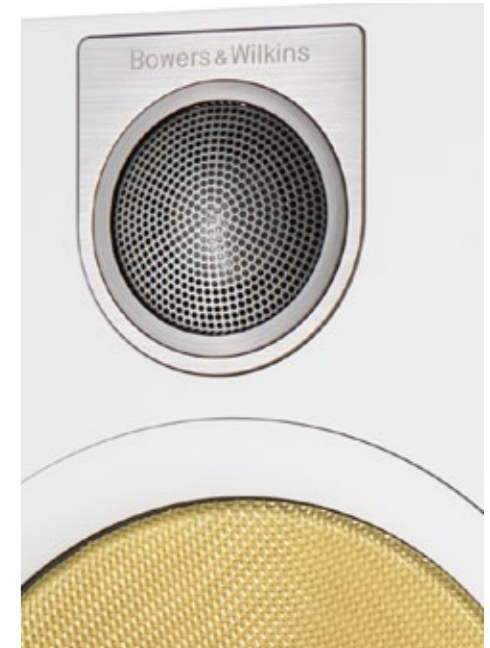


Both the 683 and HTM61 feature improved bass drivers with a new Dual Layer construction. The aluminium drive units are reinforced around their periphery with a second layer of aluminium. The result is a more effectively damped cone with a higher break-up frequency – shifting the break-up frequency of the driver from 4kHz to 5.5kHz – for a richer, distortion-free bass response.



Flowport
Great bass depends on a smoothly regulated airflow. Flowport minimises turbulence by using dimples, like a golf ball. They generate tiny eddy currents, over which air flows smoothly and silently. Bass sounds smooth and tight at all volumes.

Finishes The new 600 Series is designed to stylishly and subtly integrate with any room design. Smaller and slimmer than ever, yet with vastly improved audio response, the new 600 Series is available in Black Ash and White finishes.



Speakers, after all, are furniture. They have a form as well as a function. You'll find the craftsmanship and quality of finish on Bowers & Wilkins 600 Series speakers reflect the high standard of engineering and innovation inside them. Our Black Ash and White finishes feature painted baffles and complementary black or grey grilles depending on the finish chosen.

Detailing is improved too. The 600 Series features a new brushed aluminium, diamond-cut logo plate that encompasses the tweeter. A fixed steel grille protects the valuable tweeter from unwanted damage.



Listen and you'll see Of course, the story doesn't end with the new 600 Series. Just as the pursuit for the perfect speaker will always continue, so does the passion for sound. Bowers & Wilkins has created a space for people who are passionate about sound, where you can come for ideas and inspiration and to share your experience with others. We call it Society of Sound. And members get the latest news in the world of audio and music, as well as access to some of the most exciting new music around – picked by Society of Sound Fellows including Peter Gabriel, Real World Studios and the London Symphony Orchestra. Come to www.bowers-wilkins.com to find out more about the Society of Sound.

Main

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Technical features	Decoupled Double Dome aluminium tweeter with Nautilus™ tube loading Kevlar® brand fibre cone FST™ midrange driver Dual-layer aluminium cone bass driver Flowport™	Decoupled Double Dome aluminium tweeter with Nautilus™ tube loading Kevlar® brand fibre cone bass/midrange drivers Flowport™	Decoupled Double Dome aluminium tweeter with Nautilus™ tube loading Kevlar® brand fibre cone bass/midrange Flowport™
Description	3-way vented-box system	2-way vented-box system	2-way vented-box system
Drive units	1x ø25mm (1 in) aluminium dome high-frequency 1x ø150mm (6 in) woven Kevlar® cone FST™ midrange 2x ø165mm (6.5 in) aluminium cone bass	1x ø25mm (1 in) aluminium dome high-frequency 2x ø130mm (5 in) woven Kevlar® cone bass/midrange	1x ø25mm (1 in) aluminium dome high-frequency 1x ø165mm (6.5 in) woven Kevlar® cone bass / midrange
Frequency range	-6dB at 30Hz and 50kHz	-6dB at 45Hz and 50kHz	-6dB at 45Hz and 50kHz
Frequency response	52Hz - 22kHz ±3dB on reference axis	72Hz - 22kHz ±3dB on reference axis	52Hz - 22kHz ±3dB on reference axis
Dispersion	Within 2dB of reference response Horizontal: over 60° arc Vertical: over 10° arc	Within 2dB of reference response Horizontal: over 60° arc Vertical: over 10° arc	Within 2dB of reference response Horizontal: over 60° arc Vertical: over 10° arc
Sensitivity	89dB spl (2.83V, 1m)	87dB spl (2.83V, 1m)	87dB spl (2.83V, 1m)
Harmonic distortion	2nd and 3rd harmonics (90dB, 1m) <1% 95Hz - 22kHz <0.5% 120Hz - 20kHz	2nd and 3rd harmonics (90dB, 1m) <1% 140Hz - 22kHz <0.5% 180Hz - 20kHz	2nd and 3rd harmonics (90dB, 1m) <1% 95Hz - 22kHz <0.5% 140Hz - 20kHz
Nominal impedance	8Ω (minimum 3.0Ω)	8Ω (minimum 4.0Ω)	8Ω (minimum 4.0Ω)
Crossover frequency	400Hz, 4kHz	4kHz	4kHz
Recommended amplifier power	25W - 200W into 8Ω on unclipped programme	25W - 150W into 8Ω on unclipped programme	25W - 100W into 8Ω on unclipped programme
Max. recommended cable impedance	0.1Ω	0.1Ω	0.1Ω
Dimensions	Height: 985mm (38.8 in) cabinet only 1020mm (40.2 in) including plinth but not feet Width: 190mm (7.5 in) cabinet only 320mm (12.6 in) over plinth Depth: 364mm (14.3 in) cabinet, grille and terminals only 370mm (14.6 in) over plinth	Height: 920mm (36.2 in) cabinet only 955mm (37.6 in) including plinth but not feet Width: 160mm (6.3 in) cabinet only 235mm (9.3 in) over plinth Depth: 234mm (9.2 in) cabinet, grille and terminals only 238mm (9.4 in) over plinth	Height: 345mm (13.5 in) Width: 190mm (7.5 in) Depth: 324mm (12.8 in) cabinet, grille and terminals
Net Weight	27.2kg (59.7 lb)	14.2kg (31.2 lb)	6.8kg (14.9 lb)
Finishes	Cabinet: Black Ash White Grille: Black Light Grey	Cabinet: Black Ash White Grille: Black Light Grey	Cabinet: Black Ash White Grille: Black Light Grey

Centre

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HTM61

HTM62

Technical features	Decoupled Double Dome aluminium tweeter with Nautilus™ tube loading Kevlar® brand fibre cone bass/midrange Flowport™	Decoupled Double Dome aluminium tweeter with Nautilus™ tube loading Kevlar® brand fibre cone FST™ midrange driver Dual-layer aluminium cone bass driver Flowport™	Decoupled Double Dome aluminium tweeter with Nautilus™ tube loading Kevlar® brand fibre cone bass/midrange Flowport™
Description	2-way vented-box system	3-way vented-box system	2-way vented-box system
Drive units	1x ø25mm (1 in) aluminium dome high-frequency 1x ø130mm (5 in) woven Kevlar® cone bass/midrange	1x ø25mm (1 in) aluminium dome high-frequency 1x ø100mm (4 in) woven Kevlar® cone FST™ midrange 2x ø165mm (6.5 in) aluminium cone bass	1x ø25mm (1 in) aluminium dome high-frequency 2x ø130mm (5 in) woven Kevlar® cone bass/midrange
Frequency range	-6dB at 54Hz and 50kHz	-6dB at 42Hz and 50 kHz	-6dB at 48Hz and 50kHz
Frequency response	62Hz - 22kHz ±3dB on reference axis	50Hz - 22 kHz ±3dB on reference axis	70Hz - 22kHz ±3dB on reference axis
Dispersion	Within 2dB of reference response Horizontal: over 60° arc Vertical: over 10° arc	Within 2dB of reference response Horizontal: over 20° arc Vertical: over 60° arc	Within 2dB of reference response Horizontal: over 20° arc Vertical: over 60° arc
Sensitivity	85dB spl (2.83V, 1m)	88dB spl (2.83V, 1m)	87dB spl (2.83V, 1m)
Harmonic distortion	2nd and 3rd harmonics (90dB, 1m) <1% 110Hz - 22kHz <0.5% 180Hz - 20kHz	2nd and 3rd harmonics (90dB, 1m) <1% 95Hz - 22 kHz <0.5% 180Hz - 20 kHz	2nd and 3rd harmonics (90dB, 1m) <1% 120Hz - 22kHz <0.5% 180Hz - 20kHz
Nominal impedance	8Ω (minimum 5.2Ω)	8Ω (minimum 3.0Ω)	8Ω (minimum 4.0Ω)
Crossover frequency	4kHz	400Hz, 4kHz	4kHz
Recommended amplifier power	25W - 100W into 8Ω on unclipped programme	30W - 150W into 8Ω on unclipped programme	25W - 120W into 8Ω on unclipped programme
Max. recommended cable impedance	0.1Ω	0.1Ω	0.1Ω
Dimensions	Height: 315mm (12.4 in) Width: 160mm (6.3 in) Depth: 229mm (9.0 in) cabinet, grille and terminals 233mm (9.2 in) cabinet, grille and wall bracket	Height: 218mm (8.6 in) Width: 590mm (23.2 in) Depth: 304mm (12 in) cabinet, grille and terminals	Height: 160mm (6.3 in) Width: 480mm (18.9 in) Depth: 279mm (11 in) cabinet, grille and terminals
Net Weight	4.6kg (10.1 lb)	17.2kg (37.8 lb)	7.9kg (17.3 lb)
Finishes	Cabinet: Black Ash White Grille: Black Light Grey	Cabinet: Black Ash White Grille: Black Light Grey	Cabinet: Black Ash White Grille: Black Light Grey



Subwoofer

ASW610XP

ASW610

ASW608

Technical features	Paper/Kevlar® cone drive unit 500W ICEpower® amplifier	Paper/Kevlar® cone drive unit 200W ICEpower® amplifier	Paper/Kevlar® cone drive unit 200W ICEpower® amplifier
Description	Active closed-box subwoofer system	Active closed-box subwoofer system	Active closed-box subwoofer system
Drive units	ø250mm (10 in) paper/Kevlar® cone long-throw	ø250mm (10 in) paper/Kevlar® cone long-throw	ø200mm (8 in) paper/Kevlar® cone long-throw
Frequency range	-6dB at 18Hz and 25/140Hz adjustable (EQ at A)	-6dB at 20Hz and 25/140Hz adjustable (EQ at A)	-6dB at 23Hz and 25/140Hz adjustable (EQ at A)
Frequency response	±3dB 25Hz – 40/140Hz adjustable (EQ at A)	±3dB 27Hz – 40/140Hz adjustable (EQ at A)	±3dB 32Hz – 40/140Hz adjustable (EQ at A)
Bass Extension	-6dB at 18Hz (position A) -6dB at 23Hz (position B) -6dB at 28Hz (position C)	-6dB at 20Hz (position A) -6dB at 25Hz (position B) -6dB at 30Hz (position C)	-6dB at 23Hz (position A) -6dB at 28Hz (position B) -6dB at 36Hz (position C)
Amplifier	Power output: 500W Rated power Consumption: 94W/0.8W standby Input impedance: 33kΩ Signal / noise: >80dB Functions: Input level (line in) Input level (speaker in) Low-pass filter frequency (line in only) Low-pass filter bypass Bass extension Bass roll-off alignment Auto sense on/standby Phase switch Inputs: Line In (RCA Phono) Speaker in (Binding post) 12v trigger (3.5mm jack)	Power output: 200W Rated power Consumption: 40W/0.5W standby Input impedance: 33kΩ Signal / noise: >90dB Functions: Input level (line in) Input level (speaker in) Low-pass filter frequency (line in only) Low-pass filter bypass Bass extension Bass roll-off alignment Auto sense on/standby Phase switch Inputs: Line In (RCA Phono) Speaker in (Binding post) 12v trigger (3.5mm jack)	Power output: 200W Rated power Consumption: 40W/0.5W standby Input impedance: 33kΩ Signal / noise: >90dB Functions: Volume level (line in) Volume level (speaker in) Low-pass filter frequency (line in only) Low-pass filter bypass Bass extension Bass roll-off alignment Auto sense on/standby Phase switch Inputs: Line In (RCA Phono) Speaker in (Binding post) 12v trigger (3.5mm jack)
Low-pass filter	Active 4th -order, variable cut-off frequency	Active 4th -order, variable cut-off frequency	Active 4th -order, variable cut-off frequency
Dimensions	Height: 325mm (12.8 in) not including feet Width: 325mm (12.8 in) Depth: 374mm (14.7 in) including grille and controls	Height: 310mm (12.2 in) not including feet Width: 310mm (12.2 in) Depth: 375mm (14.8 in) including grille and controls	Height: 260mm (10.2 in) not including feet Width: 260mm (10.2 in) Depth: 330mm (13 in) including grille and controls
Net weight	15.5kg (34.4 lb)	12.5kg (27.6 lb)	8.85kg (19.5 lb)
Finishes	Cabinet: Black White Grille: Black Light Grey	Cabinet: Black White Grille: Black Light Grey	Cabinet: Black White Grille: Black Light Grey



Surround

DS3

Technical features	Nautilus™ tube loaded aluminium dome tweeter Kevlar® brand fibre cone bass/midrange
Description	2-way closed-box selectable dipole/monopole surround system
Drive units	1x ø25mm (1 in) aluminium dome high-frequency 2x ø80mm (3 in) midrange / high frequency 1x ø130mm (5 in) woven Kevlar® cone bass / midrange
Frequency range	-6dB at 63Hz and 42kHz (monopole mode) -6dB at 63Hz and 15kHz (dipole mode)
Frequency response	85Hz – 22kHz ±3dB on reference axis (monopole mode) 85Hz – 10kHz ±3dB power averaged over front hemisphere (dipole mode)
Dispersion	Monopole mode: within 2dB of reference response Horizontal: over 40° arc Vertical: over 10° arc Dipole mode: horizontal figure of eight Effective null zone ±20° (250Hz – 15kHz)
Sensitivity	89dB spl (2.83V, 1m)
Harmonic distortion	2nd and 3rd harmonics (90dB, 1m) <1% 130Hz – 20kHz
Nominal impedance	8Ω (minimum 3.3Ω)
Crossover frequencies	4kHz (monopole mode) 250Hz (dipole mode)
Power handling	25W – 100W into 8Ω on unclipped programme
Max. recommended cable impedance	0.1Ω
Dimensions	Height: 249mm (9.8 in) Width: 380mm (15 in) Depth: 153mm (6 in)
Net Weight	5.2kg (11.5 lb)
Finishes	Black cabinet and grille



Bowers & Wilkins

www.bowers-wilkins.com

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