



B&W Bowers & Wilkins

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with technical developments.

A purity of sound, derived from the Nautilus™ 800 Series, married to B&W's renowned quality of design, materials and construction make the 700 Series a thoroughbred range, capable of delivering a stunning experience in any size, shape or style of space.

700 Series



Substance and subtlety.

Remember when you heard your favourite record on CD for the first time? Who was it? It doesn't matter. Just remember how it felt: picking out instruments and voices you didn't know were there; the sense of standing in the studio, consumed by sound...

If you want to repeat the sensation, if you want to feel sound as if it were new, you might need to change the way it reaches your ears. The 700 Series from Bowers & Wilkins offers the perfect upgrade for audiophiles looking for maximum substance and subtlety from their speakers. They represent everything that's best about B&W: world-beating Nautilus™ 800 technologies delivering matchless sound from contemporary, computer-modelled, handcrafted cabinets.

They come from the company whose record of converting breakthrough research into outstanding products has consistently won it a presence in the world's most demanding audio environments. We don't imagine George Lucas, for example, or the engineers at Abbey Road, have much time for insubstantial experiences at their respective studios.

Driven by invention

Acknowledged in the audio industry as the 'University of Sound', the B&W Research Establishment at Steyning in southern England has been making waves for 30 years. This hub of workshops, laboratories and listening rooms has exerted an influence on the way recorded sound is heard in studios, concert halls and homes all around the world.

In seemingly ever-decreasing circles, our engineers are constantly revisiting and refining their own innovations in cabinet and component design. The only time they accept convention is when it can't be improved upon. It was here that B&W created the original Nautilus™ speaker, whose definitive, groundbreaking technologies have since been diffused into our more widely available ranges.

That process of innovation and application is an art in itself. On every speaker they design, B&W engineers use an array of advanced tools to probe deeper into the nuances of recorded sound. From laser measurement of diaphragm and cabinet behaviour to sophisticated finite element analysis – these are the instruments we use to minimise vibration and resonance in ranges such as the 700 Series.

The final tool, however, is always the human ear. Only when they are satisfied with what they hear in rigorous listening tests do our engineers pass a product for manufacture. And then they go back and start again.



Tweeter

One of the breakthroughs made in the five-year research programme to develop our unique Nautilus™ loudspeaker was the tube-loaded tweeter. Unwanted sound radiation from the back of the diaphragm is spirited away into an acoustic black hole by a tapering, tubular tail, while the 'good' sound from the front is allowed by the close fit of the tweeter housing to disperse freely and create a truly three-dimensional sound 'image'.

Kevlar®

As impervious to cone 'break-up' as it is to gunfire, Kevlar® has become a trademark of B&W midrange and bass/midrange drivers since our engineers first observed how the woven fabric – developed for bulletproof vests – dissipated the concentric standing waves that cause unwanted sound coloration. What a discovery. Years of refinements of resins, damping materials and cone geometries have preserved its unrivalled purity of delivery.

Paper/Kevlar®

It's a versatile material, paper. It can perform some surprisingly heavy-duty jobs. We blend paper and Kevlar® fibres with resin to create a bass driver diaphragm stiff enough to resist deformation by large forces either from the voice coil or from high pressures generated inside the speaker cabinet. The 'slam' of fast, clean bass lines and drum remains intact, all the way up the volume scale.

Flowport

Getting the breathing right is a serious issue for singers – and speakers. Ports are the lungs of a loudspeaker, regulating the pressure inside the cabinet and allowing drivers to give full voice to bass frequencies. B&W's Flowport lets air oscillate in and out of the cabinet smoothly, avoiding the distraction of the 'chuffing' sounds that affect conventional designs, thanks to the reduction of turbulence by 'dimples' in the surface.



Nautilus™

Briefed to go to any lengths to deliver the perfect loudspeaker, B&W engineers emerged five years later with Nautilus™. It revolutionised the way we create speakers. The tapering, tubular forms and the coiled, conch-like bass cabinet spirited away internal resonances. Inside lay a host of advanced technologies that produced sound of unrivalled purity.

Attention to detail

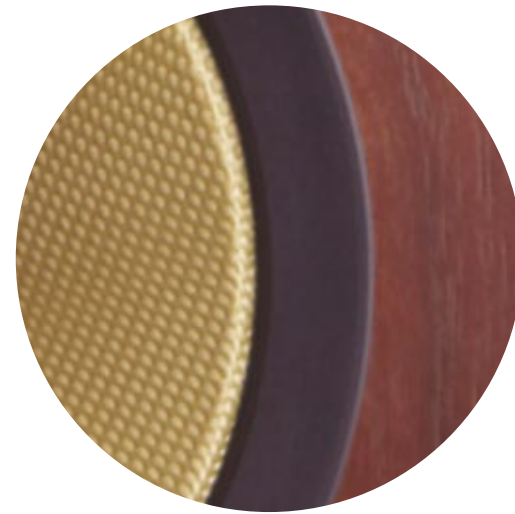
It's what's under the bonnet that really counts. Unlike many car manufacturers – and some loudspeaker companies – we never dress up the same engine in different clothes. We are continuously revisiting the performance of components, testing them under new conditions and in new systems, and optimising their output.

Look at it this way; great chefs don't just reproduce recipes. Each time they prepare a dish, they refine the choice and balance of the ingredients. They are perfectionists, tasting constantly and fine-tuning to finally master the dish and create a culinary experience. Our engineers share the same dedication to their craft, and it's that attention to the smallest detail that divides good speaker designs from great ones.



Tweeter

We have tweaked our Nautilus™ tweeter and pushed its response limits higher than ever before, in order to bring home the advantages of new recording formats like DVD-A and SACD. The dome and voice coil in the 700 Series tweeter have been restructured and the magnet centre pole has been copper-coated, which both contribute to the more extended frequency response. No need for a separate supertweeter here.



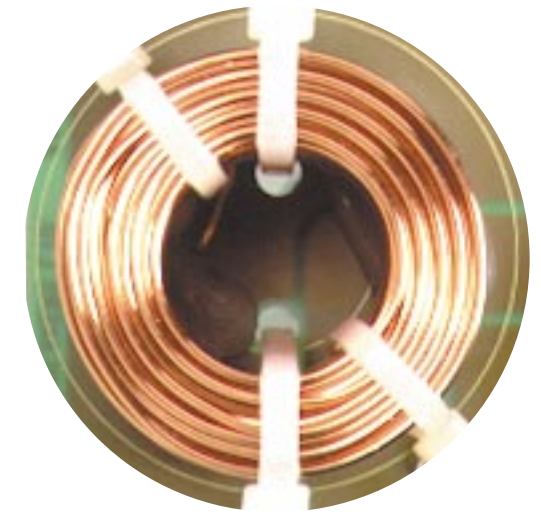
FST

We all remember from schoolboy physics, don't we, that sound travels faster in water than air? The reasons for our FST driver are a little more complex, but still involve material discontinuities. Instead of the conventional roll surround, the driver is supported by a lighter, flexible ring, moulded from a specially selected polymer that's matched mechanically and acoustically to the cone. The point? To dramatically reduce the energy reflected back into the cone, and preserve the clarity and detail of the sound.



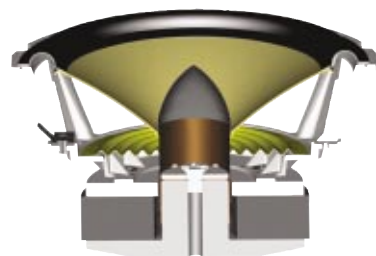
Cabinet design

700 Series cabinets are much more than empty boxes. Inside and out, we have minimised every physical impediment to pure sound enjoyment. Since the tweeter is set back from the front of the speaker to align it acoustically with the other drivers, the ledge in front of it would potentially diffract the tweeter's high frequency output and cause time-smearing of the sound. We have made that edge disappear by adopting a one-piece top and front panel that curves, uninterrupted at the top of the speaker. Inside, the cabinet side panels taper from front to back to minimise coloration from air resonances behind the drivers, and a system of strategically-placed bracing members stiffen the walls against panel resonances.



Crossover

There are three things required of a crossover. It must equalise the driver responses, and then blend them seamlessly – performance parameters that can be measured. Finally, its constituent parts must degrade the signal as little as possible – a characteristic that can only be judged by the human ear. So, once we are close to creating a crossover that can perform the first two to our standards, all we can do is listen – over and over and over again – to different capacitors, for example, until we find the purest, most natural-sounding union of components.



Drive units

Utilising the latest laser-based measuring techniques, we have further deepened our knowledge about the causes and effects of driver distortion. Our refinements here involve copper coating the magnet centre pole in the midrange driver and adding an aluminium disc to linearise the driving force, thereby enhancing clarity and consistency of character. Just behind the diaphragm, the streamlined, open structure of the chassis frees the airflow, and thereby optimises the dynamics of the driver.

The music we dwell on and live with should strike chords deep within us. Such is the level of detail and clarity of the B&W sound 'image', the same piece of music can be rediscovered and experienced afresh every time it is played. Whether providing a gentle tonic after a difficult day or a full-blooded recital demanding the closest possible listening, the B&W 700 Series never fails to deliver.



The tension on the bow as the cellist draws it across the strings... The hornplayer straining to hit the high note... The band on stage, at their peak, playing as one... Relive every second, again and again...



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They say movies are never the same on TV as at the cinema, but a set of 700 Series loudspeakers can get you close... very close. Surround sound of the highest quality and purity will put the action on a cinema-scale acoustic stage, in your own home.

Power and finesse – the 700 Series has them in abundance. From scenes in which you can hear a pin drop to the uproar of the denouement, a home cinema set-up will drop you straight into the middle of it all.



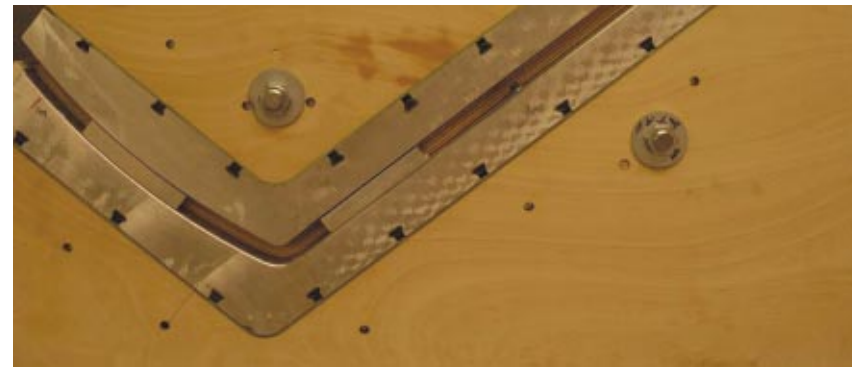
Material perfection

There's probably nowhere else in the world that has retained the quality of traditional furniture-making skills still found in Denmark. Over the last century, contemporary Danish designers have worked with those skills and techniques, not against them, to create some of the era's most iconic and ageless furniture, and preserving an industry in the process.

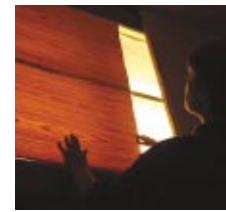
We regard our 700 Series speakers as functioning furniture, which is why we have them assembled at our own cabinet factory in Denmark. After all, there is no point in striving for perfect performance in a speaker if the physical object destroys the harmony of its setting.

A properly balanced factory environment is where it all begins. Temperature and humidity within the plant are constantly monitored and regulated to maintain the stability of the woods as they progress through the different processes.

The very best veneers from sustainable sources arrive at the factory to be sifted through and matched by specialists with years of experience. Panels are milled by the best CNC machines to fit precisely together, and the front panel is expertly bent to shape by powerful presses. The veneers are applied, and then layers of lacquer, with the final coat left to a robot, for absolute consistency of finish.



In parts, the factory in Denmark resembles a laboratory more than a production line. Sheets of veneer are scrutinised minutely, environmental conditions are precisely controlled and robots carry out sensitive tasks.



The same attention to detail applied to the component parts of a 700 Series speaker is paid to its construction. Fabrication of each element employs the finest materials and the finest tolerances.



Floorstanders and bookshelf speakers

Substance and subtlety, in perfect balance. That's what you'll find in the 700 Series range of floorstanding and bookshelf speakers.

You know it just by looking at them. Hand-built to give the most sure-footed performance and reinforced internally with bracing akin to that of a ship's hull, these three speakers are no light-weights. Equally, the fine lines and exquisite real wood veneers of the cabinets reflect the level of detail in the sound they produce.

Everything about them is trademark B&W. Nautilus™-derived tweeter technology, B&W's characteristic yellow Kevlar® bass/midrange cones and our blended paper/Kevlar® bass cones generate a sound of impeccable depth and clarity.

The 705 bookshelf speaker is an outstanding solution either as part of a five-channel home cinema system or in a pair for an audio-only system. The floorstanders, the 2.5-way 704 and the 3-way 703, harness the full power and depth of detail of which our technologies are capable. Use them as front speakers in a larger home cinema set-up or in a high-performance two-channel audio system.



DM703

DM704

DM705

Technical features

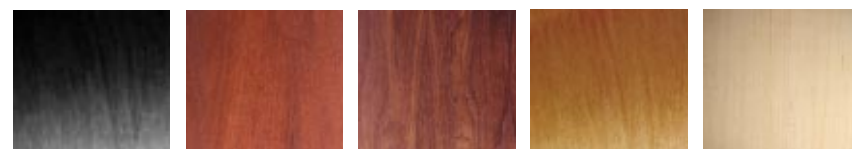
	Free-mounted Nautilus™ tweeter Kevlar® brand fibre cone FST™ midrange Paper/Kevlar® cone bass Flowport™	Free-mounted Nautilus™ tweeter Kevlar® brand fibre cone bass/midrange Paper/Kevlar® cone bass Flowport™	Free-mounted Nautilus™ tweeter Kevlar® brand fibre cone bass/midrange Flowport™
Description	3-way vented-box system	2.5-way vented-box system	2-way vented-box system
Drive units	2x ø165mm (6.5 in) Paper/Kevlar® cone bass 1x ø160mm (6 in) woven Kevlar® cone FST™ midrange 1x ø25mm (1 in) alloy dome high-frequency	1x ø165mm (6.5 in) Paper/Kevlar® cone bass 1x ø165mm (6.5 in) woven Kevlar® cone bass/midrange 1x ø25mm (1 in) alloy dome high-frequency	1x ø165mm (6.5 in) woven Kevlar® cone bass/midrange 1x ø25mm (1 in) alloy dome high-frequency
Frequency range	-6dB at 30Hz and 50kHz	-6dB at 30Hz and 50kHz	-6dB at 43Hz and 50kHz
Frequency response	38Hz – 25kHz ±3dB on reference axis	40Hz – 25kHz ±3dB on reference axis	46Hz – 25kHz ±3dB on reference axis
Dispersion	Within 2dB of reference response Horizontal: over 40° arc Vertical: over 10° arc	Within 2dB of reference response Horizontal: over 40° arc Vertical: over 10° arc	Within 2dB of reference response Horizontal: over 40° arc Vertical: over 10° arc
Sensitivity	90dB spl (2.83V, 1m)	90dB spl (2.83V, 1m)	89dB spl (2.83V, 1m)
Harmonic distortion	2nd and 3rd harmonics (90dB, 1m) <1% 80Hz – 20kHz <0.5% 150Hz – 20kHz	2nd and 3rd harmonics (90dB, 1m) <1% 55Hz – 20kHz <0.5% 60Hz – 20kHz	2nd and 3rd harmonics (90dB, 1m) <1% 90Hz – 20kHz <0.5% 150Hz – 18kHz
Nominal impedance	8Ω (minimum 3.0Ω)	8Ω (minimum 4.1Ω)	8Ω (minimum 4.6Ω)
Crossover frequency	350Hz, 4kHz	150Hz, 4kHz	3.7kHz
Recommended amplifier power	50W – 200W into 8Ω on unclipped programme	50W – 150W into 8Ω on unclipped programme	50W – 120W into 8Ω on unclipped programme
Max. recommended cable impedance	0.1Ω	0.1Ω	0.1Ω
Dimensions	Height: 1007mm (39.7 in) Width: 232mm (9.1 in) Depth: 357mm (14.1 in)	Height: 957mm (37.7 in) Width: 222mm (8.7 in) Depth: 319mm (12.6 in)	Height: 421mm (16.6 in) Width: 222mm (8.7 in) Depth: 319mm (12.6 in)
Net Weight	27 kg (60 lb)	21 kg (46 lb)	9.5 kg (21 lb)
Finishes	Cabinet: Real wood veneers Black Ash Cherry Alder Rosenut Walnut Grille: Black cloth	Cabinet: Real wood veneers Black Ash Cherry Alder Rosenut Walnut Grille: Black cloth	Cabinet: Real wood veneers Black Ash Cherry Alder Rosenut Walnut Grille: Black cloth

FS-700

Description	Floor stand
Dimensions	Height: 604mm (23.8 in) Width: 367mm (14.5 in) Depth: 240mm (9.5 in)
Net weight	8 kg (17.6 lb)
Finishes	Pillar: Black or silver Base and top: Black



To allow you to tailor the appearance of your 700 Series speakers to your own taste and environment, we have created a set of alternative finishes. Choose from five real wood veneer finishes: black, rosenut, walnut, cherry, maple.



Home cinema speakers

DS 7 surround speaker

Fetch the popcorn, turn off the lights and take your seats for a true-to-life cinematic experience...

With DS 7 surround speakers in the room, you can recreate the all-enveloping sound field of an auditorium, without leaving your seat.

The DS 7 has two modes. The first mode is that of a 'normal' speaker, a so-called monopole, in which the sound is generated by two forward-facing drive units: a tweeter and a bass/midrange. The second mode is that of a dipole, which utilises a pair of 80mm side-firing cone drivers to simulate the diffuse sound field of the cinema.

The monopole mode creates a more precise sound image, but is more restrictive of the listener's position. Switching to dipole operation disconnects the tweeter in favour of the two side drivers, and the crossover frequency to the bass/midrange is lowered. The more ambient sound, balanced across a wider area, means that a large group of listeners can enjoy the movie theatre experience. With enough seats, you could start charging admission.

HTM 7 centre speaker

The speaker taking centre stage in any home cinema set-up has to be able to convey all the important information on a soundtrack, especially dialogue, with undiluted clarity. Some centre speakers include an artificial balance to enhance speech. However, most of these simply sound, well, artificial, since they are not properly timbre-matched to the other speakers in the installation. With the HTM 7, we have taken a more natural approach, concentrating on creating a speaker that is inherently low in distortion and coloration. Even the faintest whisper is as clear as a bell.



DS7

Technical features

	Nautilus™ tweeter Woven Kevlar® brand fibre cone bass/midrange
Description	2-way closed-box selectable dipole/monopole surround system
Drive units	1x ø25mm (1 in) alloy dome high-frequency 2x ø100mm (4 in) midrange/high frequency 1x ø165mm (6.5 in) woven Kevlar® cone bass/midrange
Frequency range	6dB at 60Hz and 42kHz (monopole mode) -6dB at 60Hz and 15kHz (dipole mode)
Frequency response	80Hz – 22kHz ±3dB on reference axis (monopole mode) 80Hz – 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 ±30° (250Hz – 15kHz)
Sensitivity	89dB spl (2.83V, 1m)
Harmonic distortion	2nd and 3rd harmonics (90dB, 1m) <1% 110Hz – 20kHz
Nominal impedance	8Ω (minimum 3.0Ω)
Crossover frequency	4kHz (monopole mode) 250Hz (dipole mode)
Recommended amplifier power	25W – 120W into 8Ω on unclipped programme
Max. recommended cable impedance	0.1Ω
Dimensions	Height: 302mm (11.9 in) Width: 383mm (15.1 in) Depth: 200mm (7.9 in)
Net Weight	8.5kg (19 lb)
Finishes	Cabinet: Black or white Grille: Black or white cloth



HTM 7

Free-mounted Nautilus™ tweeter Kevlar® brand fibre cone bass/midrange Flowport™ Magnetic shielding

	Free-mounted Nautilus™ tweeter Kevlar® brand fibre cone bass/midrange Flowport™ Magnetic shielding
Description	2-way vented-box system
Drive units	1x ø165mm (6.5 in) woven Kevlar® cone bass/midrange 1x ø25mm (1 in) alloy dome high-frequency
Frequency range	-6dB at 46Hz and 50kHz
Frequency response	50Hz – 25kHz ±3dB on reference axis
Dispersion	Within 2dB of reference response Horizontal: over 40° arc Vertical: over 10° arc
Sensitivity	91dB spl (2.83V, 1m)
Harmonic distortion	2nd and 3rd harmonics (90dB, 1m) <1% 120Hz – 20kHz <0.5% 150Hz – 20kHz
Nominal impedance	8Ω (minimum 4.6Ω)
Crossover frequency	4kHz
Recommended amplifier power	50W – 120W into 8Ω on unclipped material
Max. recommended cable impedance	0.1Ω
Dimensions	Height: 306mm (12.1 in) Width: 450mm (17.7 in) Depth: 289mm (11.4 in)
Net Weight	12.5kg (28lb)
Finishes	Cabinet: Real wood veneers Black Ash Cherry Alder Rosenut Walnut Grille: Black cloth



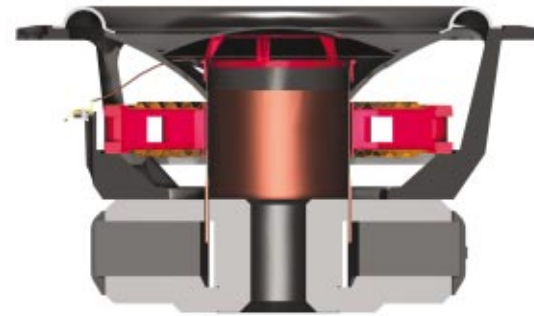
Subwoofers

ASW 700

ASW 750

If you're after a home cinema set-up with substance, the 700 Series will not disappoint. But for sound of truly heroic proportions, and to feel the true acoustic of any recorded environment, whether it's a concert hall or battlefield, add a 700 Series subwoofer. Its ultra-low bass will add a whole new level to your home cinema experience.

There are two models, one marginally more awesome than the other. The ASW700 comprises a 10" driver with a 500W amplifier. Its big brother, the ASW750, has a 12" driver with a 1000W amp. Both drivers have a paper/Kevlar® cone. Which to choose? How solid are your foundations?



Encased in totally airtight cabinets that are extensively braced internally, the diaphragm assemblies of the ASW700 and ASW750 subwoofers are wonders of acoustic engineering. Vital to their ability to produce impulsive bass – or 'slam' – is a piston-like behaviour, generated by their ultra-solid construction. The stiff paper/Kevlar® cone, stiffened paper dust cap and carbon fibre coil bobbin are bonded together in our unique, second-generation 'mushroom' construction, creating a unity that reduces deformation to the barest minimum.



Insignificant to look at, phenomenal to hear. The impact from the 700 Series subwoofers is generated by their on-board amplifier modules, rated at 500W and 1000W and cosseted away in an isolated cavity at the rear of the cabinet. Just for good measure, several subs can be daisy-chained together – in case 1000W isn't quite enough.



Technical features

	Paper/Kevlar® cone drive unit 500W Amplifier	Paper/Kevlar® cone drive unit 1000W Amplifier
Description	Active closed-box subwoofer system	Active closed-box subwoofer system
Drive unit	ø250mm (10 in) paper/Kevlar® cone long-throw	ø300mm (12 in) paper/Kevlar® cone long-throw
Frequency range	-6dB at 17Hz and 40/140Hz adjustable (EQ at A)	-6dB at 15Hz and 40/140Hz adjustable (EQ at A)
Frequency response	±3dB 22Hz – 31/110Hz adjustable (EQ at A)	±3dB 20Hz – 31/110Hz adjustable (EQ at A)
Amplifier	Power output: 500W Input impedance: 33kΩ Signal / noise: >90dB Functions: Input level Low-pass filter frequency Low-pass filter bypass Bass roll-off alignment Auto sense on/standby Phase switch Inputs: Line In (RCA Phono) Outputs: Line Out (RCA Phono) high-passed Link Out (RCA Phono)	Power output: 1000W continuous Input impedance: 33kΩ Signal / noise: >90dB Functions: Input level Low-pass filter frequency Low-pass filter bypass Bass roll-off alignment Auto sense on/standby Phase switch Inputs: Line In (RCA Phono) Outputs: Line Out (RCA Phono) high-passed Link Out (RCA Phono)
Low-pass filter	Active 2nd-order, variable cut-off frequency	Active 2nd-order, variable cut-off frequency
High-pass filter	Active 3rd -order -6dB at 80Hz	Active 3rd -order -6dB at 80Hz
Rated power consumption	75W	150W
Dimensions	Height: 347mm (13.7 in) not including feet Width: 340mm (13.4 in) Depth: 408mm (16.1 in) including grille and controls	Height: 437mm (17.2 in) not including feet Width: 396mm (15.6 in) Depth: 479mm (18.9 in) including grille and controls
Net weight	26.5kg (58 lb)	32kg (70 lb)
Cabinet finish	Real wood veneers Black Ash Cherry Alder Rosenuit Walnut	Real wood veneers Black Ash Cherry Alder Rosenuit Walnut
Grille	Black cloth	Black cloth

