

Bowers & Wilkins

Panorama



Widescreen for your ears

Good things don't always come in big packages. Take your TV, for instance. For years, the television has been getting slimmer, flatter, more streamlined, while producing a picture quality that's better than ever before. Sound is a different story. To experience cinema-like sound at home, you need several bulky speakers, taking up space in different positions in the room. That is, until now. Panorama adds a whole new dimension to home entertainment, bringing truly immersive surround sound to your TV from a single, discreet speaker. Movies, music and games come to life in a way you never thought possible. You won't believe what a big difference a small box can make.



The language of dreams



There's a reason why they call it the movies. And it's not just to do with what's happening on screen. Cinema moves you. It transports you to other places: different times, faraway lands, alien worlds. It's the language of emotions. Of dreams.

B&W knows a thing or two about dreams. After all, our company was founded on one. John Bowers always dreamed of building the perfect loudspeaker – one that brings the listener as close as possible to sound as it was recorded. That was our goal more than 40 years ago, and it remains so to this day.

Cinema speaks in transformative experiences. It brings its audience so close to a dream of reality that, just for a moment, they feel as though they can reach out and touch it. At B&W, that's a language we understand very well.



Even if you've never heard of James Newton Howard, you'll be familiar with his music. One of Hollywood's most sought after film composers, James has written unforgettable scores for films including *The Dark Knight*, *The Sixth Sense* and the Peter Jackson blockbuster *King Kong*, recorded using B&W 800 Series speakers. Find out about James' work and inspirations at the Society of Sound. Visit www.bowers-wilkins.com/sos

Where cinema sound is born

You're looking at the place where Hollywood puts music to movies. This is the control room of Skywalker Sound in Marin County, California. It's one of the most advanced audio production facilities in the world, and probably the ultimate multi-channel listening environment. Naturally, it uses the world's ultimate reference speaker system, featuring B&W 800 Series speakers. For speakers capable of revealing cinema sound as it was meant to be heard, you can trust B&W. The people who make movies already do.



Bringing cinema sound home B&W's CT800 Series is the world's leading sound system for custom-built home theatres, using highly refined technologies inherited from our most advanced studio-standard speakers. You'll find many of the same technologies at work in Panorama.

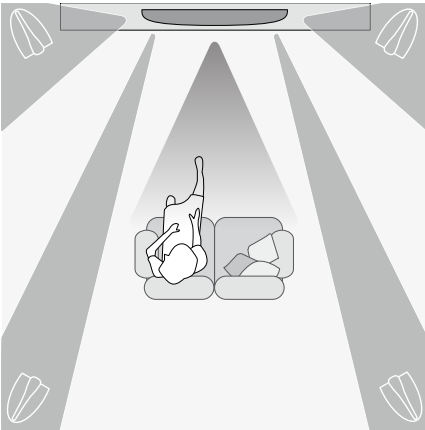




Surround yourself with sound

Movies feel different with Panorama. You don't just watch a film – you're lifted out of your seat and propelled right into the heart of the action. But how can one speaker possibly replicate the thrillingly three-dimensional effect of being in a cinema, with lifelike sound coming from every angle? In fact, the answer's all around you.

Panorama's concealed drive units use the walls of your room to guide sound around your viewing area. A combination of complex DSP technology and carefully selected and positioned drive units allows us to create a soundfield in the listening room that mimics the effect of a multi-speaker surround sound system. The sound bar's ingenious design even incorporates its own built-in powerful subwoofers and amplifier, so there's more than enough bass to handle the biggest TV movie effects without the need for a separate subwoofer. You'll be surrounded by sound – not speakers.



With Panorama, no-one needs to miss out on the full surround sound home cinema experience – no matter the shape of the room, the size of your audience, or where they're sitting.



Brilliance from any angle

With Panorama, you can enjoy all the drama and excitement of surround sound without having to fill a room with speakers. But the benefits don't end there. Panorama has a wider 'sweet spot' than a conventional 5.1 surround system, which means you're free to place the speaker in a whole range of different positions to suit your listening environment, without compromising one decibel on surround sound quality.

For example, Panorama works equally well either in corners or parallel to a wall. It's happy sitting under a TV on an audio-visual cabinet, or fixed to a wall with its own discreet built-in bracket. Its settings can be adjusted to suit any wall surface, from hard brick to soft curtains. Like all great screen performers, versatility is one of its greatest strengths. And Panorama always performs brilliantly, whichever way you look at it.



Mix and match Sound is affected by its environment – which is why Panorama can be fine-tuned to perfectly match the surfaces of your listening area. Three settings are designed to cope with hard walls like brick, less solid surfaces such as windows, and fabrics and soft furnishings.



Setting home entertainment free

The role of the television in our lives has evolved. Gone are the days when we simply sat around watching TV. Now we use it to play games, listen to music, surf the web. More and more, it's becoming the hub of family life, and the centre of our entertainment world. But up until now, that world has been lacking an important feature: sound quality. Panorama changes all that. Whether you're curling up with a cosy Sunday afternoon film or challenging the family to a game of doubles on Wii Tennis, Panorama will reveal all the detail and depth that your TV's in-built speakers miss. Family home entertainment was never this much fun.



Perfect partners Panorama will bring out the best in any home entertainment device, from games consoles such as the Nintendo Wii™ and the Sony PlayStation® 3 to Sky HD boxes and DVD players.



Passion for music

Music is important. You know it, we know it. After all, we wouldn't have spent more than 40 years developing and refining some of the world's most advanced acoustic technologies if we didn't feel passionate about music. So it shouldn't come as any surprise to learn that Panorama isn't just a great speaker for movies and games. It's a fully equipped music player too.

As a hi-fi system, Panorama has the added advantage of its own built-in Class D amplifier. Simply connect your CD player or another music device such as an MP3 player, and you're ready to experience sound quality that will take your enjoyment of music to a whole new level. And that goes whether you're listening to Gran Vals or Grand Theft Auto.



Connectivity It's easy to connect any kind of music-playing device to Panorama, from CD players to wireless base stations for playing music remotely from your PC.

Plug and play

“The best speaker isn’t the one that adds the most, it’s the one that takes away the least.” When our founder John Bowers said this, he was voicing a deeply-held belief at B&W – that as little as possible should get between the listener and the heart and soul of sound as it was originally recorded. That’s why simplicity and purity have been hallmarks at B&W from day one – both in the acoustic engineering of our speakers, and in the way we design them to be used. It’s the reason why you’ll never see any unnecessary styling or complicated-looking buttons on any of our products. It’s also the reason why using Panorama is as easy as plugging it in. Because who wants to spend time reading a bulky instruction manual when there’s music and movies to enjoy?



Even Panorama’s ergonomically shaped remote control is elegantly simple to use. Seven buttons give you direct access to all of the speaker’s features and settings.



“This could be the only sound system you’ll ever need”



B&W Product Manager Krestian Pedersen explains why Panorama is far more than just a great surround sound speaker for watching movies.

Panorama is the first soundbar from B&W. What were the differences between developing a soundbar compared to a conventional loudspeaker?

There really weren’t any differences at all. Panorama was subject to exactly the same kind of rigorous testing and tuning procedures we carry out for our 800 Series speaker, or any other speaker we make. The philosophy here is that we never release a product until we’re sure it’s the best we can possibly make it, no matter what kind of speaker we’re developing.

Conventional surround sound systems have always relied on several speakers to create an immersive effect. How does Panorama give the same experience from a single speaker?

Panorama might be a single unit, but it’s certainly not a single speaker. It actually houses six separate speaker channels: two front channels, two rear, one centre, and one subwoofer, all with their own individual class D-amplifier. These units are angled in such a way that they create a soundfield that reflects off the walls and back to the listening areas. Combine this with very powerful digital signal processing, and you get a remarkably lifelike surround sound experience.

There are other soundbars out there. What’s so special about Panorama?

Panorama is unique in lots of ways, but I think two points stand out as being the most important. First of all, it’s a B&W speaker. B&W has an amazing reputation among recording studio engineers and other serious sound buffs – and that’s because they know we never compromise on acoustic performance. The quality of the components we use, from the drive units to the grille, is quite simply the best there is – and that goes for Panorama as much as any of our other speakers. Secondly, with most other soundbars, you’ll need a separate subwoofer to generate a decent amount of bass. With Panorama, there’s no need for the external subwoofer.

Good movie and music sound reproduction depends on powerful bass. How did you manage to produce it without an external sub?

The point of a soundbar is that it’s compact and discreet. Relying on a separate subwoofer defeats the object of the exercise entirely. So when we were designing Panorama, we made it a requirement that it absolutely had to be a true one-box speaker. Getting powerful bass out of a very compact speaker was a big challenge. But we’ve achieved it, thanks to a design that incorporates two dedicated long-throw mini subwoofers attached to flowports that minimise any distortion created by air turbulence. The digital signal processing has a lot to do with it too. And it works extremely well – our tests show that Panorama delivers bass extension all the way down to about 40Hz.

Panorama has a dedicated centre channel. Why is this important?

If you leave aside the subwoofer, most of the energy of a film soundtrack goes straight to the centre channel. Also, the centre channel handles all the dialogue. The human ear is very sensitive to the sound of voice and speech – it’s our main form of communication after all – and it will immediately detect any coloration or distortion. That’s why it’s essential to get the centre channel right. The centre channel in Panorama is a two-way design consisting of two 3 inch woven midrange drive units and a one-inch aluminum dome tweeter. This design has a large combined diaphragm area, which makes for high power handling, high sensitivity and very low distortion. As a result the intelligibility of the dialogue is superb, even at very high volume levels.

Is Panorama mainly designed for home theatre?

Panorama will perform brilliantly as a home theatre audio system, but it’s also a very versatile speaker that can handle music and movies equally well. It’s fantastic for gaming too, and it’ll happily hook up to a wireless base station to play music directly from your PC. Just as the TV is becoming the hub of entertainment in the home, we see Panorama as the speaker for all of your home entertainment needs.

So it’s an all-purpose sound system you can use any way you want?

That’s right! Whatever home entertainment you enjoy, and however you enjoy it, you’ll want a great sound system to get the most out of it. And this could be the only one you’ll ever need.

Technology

With Panorama, you're not just getting a great surround sound speaker. You're getting decades of acoustic engineering experience and know-how, wrapped up in a single box. From the very beginning, B&W's dedicated research and development lab in Steyning, West Sussex – known to those in the business as 'the University of Sound' – has pushed the boundaries of what a speaker can be. Our technologies have found their way into demanding recording studios all over the world, and influenced how all other speakers are made. Now, with Panorama, you can put those same cutting-edge technologies to work bringing movies and music to life in your own home.



Tweeters Panorama's high frequency output is handled by an aluminium dome Nautilus™ tube-loaded tweeter. This acts like an acoustic black hole, swallowing superfluous sound from behind the dome. You'll find the same principle at work in our most advanced audiophile hi-fi speakers, such as the reference-standard 800 Series.



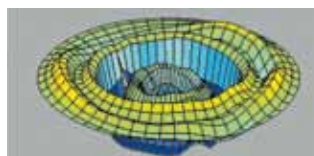
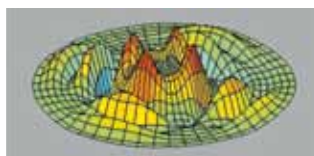
Technology

Bass To generate the powerful bass needed for movie effects, Panorama's twin internal subwoofers are designed to act like pistons, without deforming under air pressure. Driven actively by a dedicated 50W amplifier, the cones are capable of extending bass levels to 40 Hz and below.

Cabinet construction The unbroken, curving outer shell of Panorama is constructed to give the highest cabinet strength and rigidity possible. This ensures that what you hear is the drive units themselves, and not the cabinet that houses them.



Midrange The six midrange drive units that supply the bulk of Panorama's amazing sound rely on glass fibre cones, optimised using laser interferometry. These dramatically reduce the unwanted effects of standing waves, leaving music sounding clean, clear and true to life.



Ultra-wide sound Beneath Panorama's façade are drive units carefully configured to disperse surround sound to as wide a listening area as possible. That's why Panorama provides a larger "sweet spot" than conventional 5.1 surround set-ups.



Flowport™ Flowports help reduce any turbulence noise caused by the tremendous air pressures generated by a speaker's bass units. Panorama's flowports are longer than usual to allow for the huge amount of energy generated by the internal subwoofers.



DSP Digital Signal Processing is an important ingredient in the surround sound mix, adjusting the sound balance and cleverly manipulating the signal to create the impression of a fully immersive surround experience, in small and large listening environments.



The Society of Sound

Owning a great sounding system is one thing. But if you're passionate about sound, your appreciation won't stop there. You'll want to get involved, learn more and talk with others about it. That's where the Society of Sound comes in. It's a place where you can:

- Download lossless music, including super high-quality 24-Bit albums, at the B&W Music Club
- Learn from some of the most inspiring minds in the business – the Society of Sound Fellows
- Join the debate and swap ideas in the Blogs
- Discover the creative potential of sound at the Lab

Find out more at www.bowers-wilkins.com.



Set up in partnership with Peter Gabriel's Real World Records, the B&W Music Club at the Society of Sound is where you can discover brilliant, original music by an ever-changing roster of world-class artists. The music is available to download in super high-fidelity, with no compression.



Panorama

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| Description | Integrated A/V Sound System |
| Technical features | Nautilus™ tube loaded aluminium dome tweeter Flowport™ Digital Signal Processing Digital amplifier Switch mode power supply |
| Decodes: | Dolby Digital Dolby PLII DTS Stereo AAC-Mpeg2 (Japan Only) |
| Drive units | 2x ø90mm (3.5 in) subwoofers 2x ø75mm (3.0 in) midrange 4x ø75mm (3.0 in) surround channels 1x ø25mm (1 in) metal dome tweeter |
| Frequency range | -6dB at 36Hz and 50kHz |
| Amplifier power output | 1x 50W (subwoofers) 5x 25W (centre/ surround) |
| Power input voltage | USA, Canada: AC 120V, 60Hz Europe: AC 230V, 50Hz China: AC 220V, 50Hz Japan: AC 100V, 60Hz |
| Rated power consumption | 32W |
| Standby power consumption | <0.7W |
| Inputs | 2 x optical digital Toslink 1 x electrical digital Coax (RCA Phono) 2 x Analogue (RCA Phono) 3.5mm mini jack: RS-232 service connector |
| Outputs | Subwoofer pre out (RCA Phono) Output: 1 Vrms Frequency: 12 ~ 150Hz |
| Dimensions | Height 125mm (5 in) Width 1100mm (44 in) Depth 181mm (7.24 in) |
| Gross weight | 14.1kg |
| Finish | Enclosure: Mirror black stainless steel skin Grille: Black steel mesh |

Table stand and bracket included.

Bowers & Wilkins

B&W Group Ltd
Dale Road
Worthing West Sussex
BN11 2BH England

T +44 (0) 1903 221800
F +44 (0) 1903 221801
info@bwgroup.com
www.bowers-wilkins.com

B&W Group (UK Sales)
T +44 (0) 1903 221 500
E uksales@bwgroup.com

B&W Group North America
T +1 978 664 2870
E marketing@bwgroupusa.com

B&W Group Asia
T +852 2 790 8903
E info@bwgroup.hk

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