



Introduction

Panorama set the benchmark for soundbar audio performance on its launch. Panorama 2 builds on this reputation, setting the bar even higher. The developments in Panorama 2 are based upon the cutting-edge technologies developed at Bowers & Wilkins for products such as the 800 Series Diamond, the new M-1 and PV1D, and Zeppelin Air. The combination of these technologies has created not only the best sounding soundbar on the market, but also has allowed us to create a product that is simple to set-up and use.



Drive unit technology

In 5.1 soundtracks, around 60 per cent of the information is actually sent through the centre channel. As such we have decided to ensure that Panorama 2 has the capability to deal with this by including a dedicated centre channel. Many lesser soundbars create a virtual centre channel by adding this information to the left and right speakers. But Bowers & Wilkins approach with Panorama 2 results in significantly greater clarity from the centre channel, especially when it comes to the vital dialogue in movies and when watching television.

Bespoke drive units

Foremost among the new technological developments for Panorama 2 are the new drive units. The key to good cinema performance is in the low frequency: it's vital to make sure that the low frequency has the same fidelity as the mid and high frequency, as this creates a cinema experience that is absorbing and enthralling. Therefore we have carried out extensive development on the Panorama 2's low frequency drive units to increase the linear behaviour, thus ensuring that the sound is clean and tight at even high sound pressure levels.

Improved dispersion

Panorama 2 uses the same virtual surround sound algorithm as the original, however we

have redeveloped the drive units responsible for the surround channels to have a wider dispersion characteristic. This results in a more integrated 3D sound field, giving a significant improvement to the surround sound performance. These drive units are housed in their own enclosures to ensure that each of these channels is free from any aberrations caused by other drive units.

Nautilus Tapering Tube™

Panorama 2 uses an aluminium dome tweeter with a Nautilus Tapering Tube, developed for the ground-breaking Nautilus™ loudspeaker. The shape of the tube is designed so that the rear radiation from the tweeter dome is slowly attenuated by the shape. This effectively creates an acoustic black hole stopping any resonances building up behind the dome that could detrimentally affect the tweeter performance.

Flowport™

Panorama 2 also incorporates Bowers & Wilkins Flowport technology. The dimpled holes around the port reduce air turbulence in the same way as a golf ball. The ports are ultra silent so the bass is clean at all listening levels.



Audio electronics

Digital Signal Processing

Over the past five years Bowers & Wilkins has led the way with high-performance integrated audio electronics. With the development of awarding-winning products such as Zeppelin Air we have continually developed the hardware and software skills needed for these more complex products. As with the research into acoustic and advanced material that Bowers & Wilkins has become synonymous with over the past five decades, we are now leading the market in advanced electronics development. These skills have been fully utilised in the development of Panorama 2 to redesign the DSP and maximise the performance at any level.

Power supply

Great sounding audio electronics, especially amplifiers, rely on a great power source; this has not been over-looked for Panorama 2. The power supply has been designed to deliver maximum stability whilst maintaining high efficiency. Clean, low-noise power ensures that all electronic components including the amplifiers can unleash their full potential.



Design

Panorama 2 is constructed from a beautifully sculpted curved cabinet; however as attractive as this is it is not just there for aesthetic reasons. Structurally, a curved shape is very strong, like the arch of a bridge or a large domed roof, and we use this strength to ensure that Panorama 2's cabinet is as strong as possible. This stops any unwanted cabinet vibrations from muddying or colouring the sound from the Panorama 2.



