



A revelation in display technology, Samsung's 'The Wall' blends MicroLED light with AI optimisation for flawless HDR results on an awe-inspiring scale. Habitech's Jonathan Pengilley introduces the ultimate in custom screen luxury.

'The Wall' will change the display experience forever. Nothing in the tech cosmos can lay a glove on Samsung's astonishing tour-de-force: flawlessly flat, incredibly thin, mind boggling in scale and jaw-dropping to behold. When your customers aren't spell bound by its eye-popping wall-to-wall detail resolution, all-day brightness, authentically vibrant colours and infinite blacks, they'll marvel at the sheer 'infinity-pool' effect of its bezel-free edge-toedge glass construction - just 30mm deep or be seduced by the décor-blending beauty of its 'ambient mode' art bursting from the same surface

The Wall, you see, is a game-changing display technology and art form all-in-one. It's either the most awesome cinema-scale screen outside the local multiplex or a state-of-theart, always-on canvas for a decorative gallery of high-res images. And seeing really is believing because in my thirty-year experience The

Wall is the first electronic display that looks genuinely life-like. Believe me, if you didn't know you were looking at a screen, you'd be on the 18th green at the Masters or sitting in the box seats at Wimbledon. The Wall is like being there. It really is that good.

LIGHT FANTASTIC

The revelatory display comprises a lattice of MicroLED modules, which combine to create 16:9 screens with a mighty 146-in diagonal and a colossal 292-in span (that's approx. 7.5m in new money). Each module measures 806.4 x 453.6 mm (around 36 inches diagonally), having a display resolution of 960 x 540 pixels. This means that a 4×10^{-2} 4 build generates the 146-in display at 4K UHD and an 8 \times 8 construction re-creates The Wall with the 292-in diagonal at 8K res.

Even more astonishing is the ability to render the meeting of adjacent modules undetectable even up close - forget video wall grids: the surface is seamless in operation. If you're finding this claim difficult to believe I don't blame you: it stretched my credulity as well until I came within touching distance. I looked for the seams but the only way I could detect them was by the slightest bump when I ran my finger over the surface. The effect is truly mind-boggling.

For these reasons, Samsung's new creation is light years beyond other direct view LED

products. According to Seog-gi Kim, executive vice president of Samsung's visual display business, it's "unlike anything else - matching the lifestyle and taste of those looking for the most exclusive and premium visual experiences in their homes"

NEXT GEN TECHNOLOGY

Think of MicroLED as an inorganic OLED upgrade. Each pixel is the product of a cluster of three tiny self-emissive RGB LEDs. This means that the brightness and colour of every MicroLED pixel can be controlled precisely or turned off entirely to create a "perfect" black for maximum contrast and optimum colour. As a result, MicroLED tech generates a bright, contrast-rich display across wide viewing angles similar in many ways to OLED panels but with added benefits. For example, brightness is up around 2000 nits, double OLED's peak, because there's no colour filtering; power efficiency is greatly improved for the same reason - MicroLEDs can be brighter with less effort - and, at around 100,000 hours (11 years), lifespan is in a different league as well. In other words, The Wall gives you all the things you love about Organic Light-Emitting Diode panels, including the todie-for blacks and exceptional bezel-free thinness, with extra relish and none of the

MAGICAL BLACK, CONTRAST, **COLOUR AND DETAIL**

The Wall's 'Black Seal' technology puts a deep black background around the pixel clusters to ensure that the black in any scene stays black rather than grey, so the contrast level is unparalleled in direct view LED. The Wall also uses proprietary 'Ultra Chroma' colour technology, employing narrower wavelengths to deliver twice the fidelity of conventional LED, while its 'Quantum HDR' tech applies advanced HDR picture refinement technologies, including LED HDR, HDR10+ support and Multi-link HDR, to render optimum brightness and contrast in every frame. And to guarantee seamless scaling, The Wall uses Al algorithms within its 'Quantum Processor Flex' processing to dynamically upscale content to the correct resolution according to screen size and capabilities, delivering, intuitively, the best picture from the 16-module 146-in display to the magical 292-in 64-module phenomenon.

TOTAL ECOSYSTEM

Naturally, Samsung's transformative light engine has the versatility to inspire spaces beyond the home, in elite hospitality, office and retail for instance, where its super-durable engineering, astonishing size and spectacular seam-free abundance are bound to make an impression. As Samsung's literature is keen to emphasise "high-end commercial spaces such as luxury retail stores, car dealerships, stadium VIP boxes and hotel lobbies require distinctive displays with never-before-seen visuals to create a sense of luxury and leave customers with a positive perception". Our commercial

team is ready. Alongside the modular IW008R model designed for luxury living environments, Habitech will also be supporting the modular CAT-connected IW008J and IW012J products, equipped with a pixel pitch of 0.84 mm and 1.26 mm respectively while mobilising Samsung's proprietary Multi-Link HDR scene analysis, which displays any content in HDR quality without special meta-data.

EXPERIENCE GREATNESS

"Greatness" says Samsung "doesn't happen on its own". But it always stands apart. About as far removed in evolutionary terms from the conventional flat screen as the tiny 1950s CRTs that came before, The Wall is a brilliant technical and aesthetic achievement unrivalled in size, versatility and life-like image quality. For interior design pros and integrators serving luxury residential and commercial customers, its exclusive virtues will prove impossible to resist.

The Wall is now on display as part of our new demonstration suite at Basingstoke. Please contact us to arrange a visit.







