

CASE STUDY

Immersive Projection Sets Art Free at Frameless

Client: Frameless

Location: Marble Arch, London

Challenge

To create the UK's largest immersive art experience creating spectacular and shareable images that would draw visitors back time and time again.

Solution

More than 50 Panasonic 3-Chip DLP and 3LCD projectors at the heart of an interactive visual and sound experience.

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Simon Kentish

Chief Technology Officer – Frameless

When the creators of Frameless, the UK's largest digital immersive art experience, were planning their ambitious project to "set art free" at the 30,000 square feet venue in London's Marble Arch, they knew that their choice of technology partner for the projection technology was going to be critical.

The ambition was to create an immersive experience to excite and inspire visitors of all ages. Frameless would use more than 50 state-of-the-art projectors to elevate the traditional art experience to a whole new level, accompanied by a score of breath-taking classical and contemporary music played over 158 state-of-the-art surround sound speakers.

"The success of the project would stand or fall on the quality of the immersive experience that we delivered," said Simon Kentish, Chief Technology Officer, at Frameless.



A competitive selection test

To test the capabilities of the latest projectors on the market, Frameless worked with its integration partner and live events and immersive experience expert Creative Technology to organise a competitive shoot-out with the three leading projector manufacturers.

“Once we saw the Panasonic 3-Chip DLP projectors in action, they were the clear leader in picture quality and reliability,” explained Simon.

Panasonic’s original pixel-quadrupling technology in its RQ22K and RQ35K projectors produced stunning 4K+ visuals at 20000-30500 lumens. The projectors deliver uniformity in both brightness and colour performance, allowing images to be seamlessly blended, avoiding distractions or blemishes that could break the connection with the viewer.

Ability to share on social

In addition to the immersive experience, Simon said that another important factor was the ability for the projected images to be captured on video and in photos for social media.

“The ability for visitors to share images and videos of the spectacular projected art on social media was an important marketing consideration,” explained Simon. “Many of the projectors produced images that did not capture well but, if possible, the Panasonic projector images looked even better on camera!”



Reliability essential for a top attraction

The other major consideration was reliability. With a build time for the venue of just over a year, timings were tight. AV equipment would need to be installed and set-up while there was still a lot of building dust in the venue. On top of that, the venue needed projectors that would continue to deliver spectacular images day in and day out for a high profile London attraction. The filter-less design and dust-proof optical system, alongside the high performance cooling system ensures the projectors deliver 20,000 hours of real maintenance-free use.

Frameless is also using Panasonic's MZ16 projection series, which delivers long-lasting brightness and superb colour performance at 10,000lm (MZ10k), 13000lm (MZ13k), and 16000lm (MZ16k). This 3LCD technology provides vibrant HD quality images, and reliability is assured by the liquid cooled laser diodes and sealed phosphor wheel that protects against dust ingress to provide long life brightness.

Incredible new immersive applications

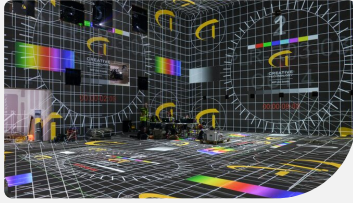
Using more than 50 Panasonic projectors in total to create ground-breaking applications, the art projections inside the attraction are delivered by 479 million pixels and 1 million lumens of brightness and vivid colour. Each of the four immersive galleries and the fifth, dedicated to corporate and educational events, have a completely different visual concept and projection layout. Art seeps into every inch of space. Visitors don't look at a picture, there are inside the picture, with every brush stroke, every splash of colour, every moment of inspiration surrounding them.

The Art of Abstraction uses projections on semi-transparent mesh screens standing like a labyrinth in the centre of a dark room to make visitors blend into the content of art from Kandinsky, Klimt, Mondrian, Malevich and Klee.

Colour in Motion uses projection and colour to bring to life every brushstroke and splash of colour in masterpieces by Monet, Van Gogh, Signac, Delaunay and Morisot. As visitors walk through the paintings, the brushstrokes and colour are moved and washed up the walls creating an immersive and interactive space.

The World Around Us was the most technically challenging installation to achieve and delivers an almost spherical six-sided projection of the landscapes, cityscapes and seascapes of Canaletto, Cezanne, Monet, Rembrandt and Ruysch.

Lastly, a room wrapped in mirrors, including projectors wrapped in mirror foil, created the dreamlike and surreal gallery called Beyond Reality. Here visitors get glimpses of visual infinity as they experience the iconic artwork of Munch, Bosch, Dali, Klimt, Rousseau and Ernst.



UST lenses essential to the immersive experience

To create the incredible immersive effects, Panasonic Ultra Short Throw (UST) lenses are used with 80% of the projectors. These specialist lenses allow projectors to be hidden in the ceilings, so as not to distract from the immersive illusion, and to project at incredible angles to surround the visitor without casting shadows.

“The content creators have pushed the capabilities of the projectors to their limits and the incredible attributes of the Panasonic projectors and periscope UST lenses has enabled us to create completely immersive experiences across both large (up to 9m high) and challenging spaces,” said Simon. “Even in the hospitality space, where we first thought equipment and objects in the room might cause shadowing, there are no issues and the projection is incredible.”

The ability for Frameless and its partners to work together closely was one of the essential elements in the success of the project. “You can’t build something as creative and challenging as this without running into some issues,” said Simon. “But the team were incredible. We were pushing the projection technology and lenses to their limits and Panasonic responded every time – even sending a specialist engineer across from Japan to assist when needed.”

Today Frameless is already proving to be one of the most popular visitor attractions in London. “There is no greater pleasure for me than standing at the entrance to one of the galleries and watching as art lovers, families and children all interact and enjoy the immersive experiences in the room. The joy on their faces is wonderful and it’s the combination of art, content creation, projection and sound that has made that happen.”

 www.youtube.com/watch?v=6Vsy-Kv7HeM&list=PLTwXQpLiSw7IRICONW_OKsI5KwNgiBqWR&index=1

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