

### Martin Audio for immersive Twist Museum



Based in London's West End, The Twist Museum is an immersive, interactive, multi-sensory attraction, set on a 15,000 sq. ft site. Challenging the visitor to explore the world of illusion, Twist - which stands for The Way I See Things - is a collaborative work of leading artists, psychologists, and neuroscientists. The audio-visual integration was entrusted to London-based Crossover, who specified, installed, programmed and commissioned essential audio-visual equipment, for management and routing over a digital backbone.

Developed by multimedia artist Aristotle Roufanis, the Digital Mirror exhibit uses a camera and large format display to create an interactive 'mirror', distorting peoples' reflections in real time. The Crossover team provided the displays, the audio system, and the back-end processing hardware, that manipulates the captured images to display the illusions and distortions to the viewer. Crossover helped the Museum's project team build another of Roufanis' creations, the Digital Kaleidoscope, with audio looping in real time on Ableton Live. The Kaleidoscope is a mirrored hexagonal tube - people entering it immerse themselves in a stunning display of colours and patterns and their reflections which are influenced by their movements and interactions. Crossover supplied and installed the projection systems, camera, processing hardware and audio system for this interactive marvel.



Martin Audio loudspeakers were specified in the Audio Interactive Space and Mind Hub where distortion free, phase coherent output was paramount. The former is a large octagonal acoustically treated 360-degree surround-sound room that immerses the visitor in soundscapes created by artist and composer Antoine Bertin. Custom-programmed LED lighting synchronises with the audio to enhance the sensory impact, with LF rumble provided by a Martin Audio SX110 1 x 10in slimline subwoofer. This was chosen “for its super compact form factor, and the fact it could be easily flown without taking up valuable floorspace,” according to Crossover Senior Systems Designer, Juan Garcia. “In addition, we are very familiar with Martin Audio and love the sound of their speakers and their reliability. The fact that the space was small, and the sub is so powerful, we only needed one SX110, to avoid hotspots and dips.” It was installed towards the side of the room - rather than the centre - in order to maximise bass coverage.

About halfway through the journey, the visitors enter the Mind Hub. Crossover installed the lighting and supplied the lighting control hardware and audio system for this spectacle, at the centre of which is a huge cube of 1,000 individually controllable LED spheres hanging from the ceiling, creating mesmerising patterns and shapes. Here and in the events area, Crossover have specified eight Martin Audio ADORN A55T, focused on background music and small events within that space, chosen for their output within a discreet footprint. These are powered by a Martin Audio VIA2004 4-channel, 2000W Class D amplifier. Elsewhere, the Upside-

Down Room and the Ames Room provide further treats for visitors, the former featuring a further Martin Audio music system with the option for a DJ to play for parties and events. A digital back end, with local touch panel interfaces allows staff to monitor the exhibits and to maintain uptime. Crossover director, David Sacks, said: "This was a brilliant project to have worked on. It was particularly rewarding because of the close collaboration with international artists to bring their visions to life with some of the best audio-visual technology around."

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