



THE SANDCASTLE

Company: Visual Productions
Location: Blackpool, UK

Blackpool is a popular tourist hotspot in the UK, which is currently undergoing a period of regeneration. The city is home to the UK's largest indoor waterpark, The Sandcastle, which is currently undergoing a phase three development in line with the modernisation of Blackpool.

The operators are keen to offer its visitors a new and exciting experience at The Sandcastle, and decided to install two new water slides - through specialist contractor Aqua Leisure International - which are incorporated into an Aztec theme. The two rides have been sourced from Canada and both are the first of their kind in the UK. One is a cannon bowl and the other is a head-first twister, which are named Aztec Falls and Montazooma respectively.

To make the new rides even more of an attraction, Aqua Leisure in partnership with SPSC's Leisure Effects Division were contracted to provide sound and lighting effects into the two rides. Rob White, MD of SPSC and Project Designer, explained: "The client wanted more than just the thrill of the ride itself and required an additional audio visual experience. SPSC were commissioned by Aqua Leisure to design and implement the system, which got approval from the management of The Sandcastle.

"Swimming pools and waterparks are very harsh environments; they are highly corrosive due to the chlorine, which creates challenges when it comes to putting electronics in." It's not the first time Leisure Effects has taken on such a task, so it had the necessary experience to carry out the works. LED par can 56's were specified for the main light source inside the bowl and parts of the tube leading to it. There are a total of 48 lamps, which work on four channels through a DMX splitter. The lamps were stripped down and modified to suit the corrosive environment prior to installation. "The client particularly liked the LED cans as they operate a low energy usage policy throughout the building. Another advantage of LED is that they are instantly on, no warm up time is required, so we can perform some really intricate flashing sequences. Each light is individually addressable, so basically we can control 255 levels of intensity and colour; we can get virtually the whole colour spectrum from these lights," said Rob.

To control the par cans, Rob researched the market for a suitable DMX lighting controller, which could be monitored and modified remotely using the internet. The research led him to Visual Productions.

During initial conversations with Rob, Visual Productions was given a short and tight brief on the specifications and requirements for the themed ride. A permanent installation with restricted control space, and a low maintenance system was

essential. There are no lighting technicians amongst The Sandcastle daily staff, so a self-running, trouble-free application was a priority. The lighting needed to be triggered by sensors as swimmers slide down the slide and enter the bowl.

The solution was a Visual Productions CueCore. The CueCore is a lighting controller for permanent installations. The device is completely solid-state, with no moving parts. It is an extremely secure and low-maintenance installation control solution with minimal power consumption.

The hardware connectivity includes 1,024 DMX out, 512 DMX in, MIDI, MTC, SMPTE real-time clock, astronomical clock, GPI contact-closures, Ethernet, Art-Net, OSC, and VisualTouch compatible.

All operating and programming is done through its dynamic web 2.0 interface. Connected to a browser, the CueCore unfolds into a lighting console, show controller, DMX / Art-Net recorder and protocol converter, making it stand out as a cost-effective, feature-rich control solution.

In the ride, Rob designed it so that the sensors were connected to the onboard dry contact ports of the CueCore. RGB effects were recorded from an external console into the memory of the CueCore. Rob then used the show control functionality of the CueCore to have these recordings triggered by the sensors. They also programmed the internal cue list system of the CueCore for adding additional lighting scenes for maintenance, cleaning and emergency situations of the swimming pool, again triggered by the dry contacts.

Rob continued: "Because we won't be onsite all the time, if the customer want a different [lighting] programme we can design it from our office and change it from there too. That was kind of the drive behind choosing the CueCore. It's the first time I've used Visual Productions, but I checked them out and they had a very good reputation. So far so good, we're really pleased with it."

To complement the lighting effects, Rob and his team have also installed 24 waterproof speakers, which run in a quadraphonic configuration. When riders are climbing the stairs to the ride entrance the sound begins to build with jungle drums and animal noises, and by the time they reach the top and are travelling down the ride, the sound effects are in full force, utilising all four audio channels. The sound and the lighting come to a peak in the bowl of Aztec Falls.

Rob concluded: "The new Aztec themed rides will open fully to the public in February 2012 amidst a full blown marketing campaign."

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