



CASE STUDY

Creating a cultural splash in Hull

QED utilises Panasonic high brightness laser projectors to deliver a spectacular architectural projection mapping event at The Deep in Hull, which was also used as a live TV broadcast backdrop for the announcement of the winner of the UK City of Culture 2021.

Client: QED

Location: Hull, UK

Product(s) supplied:

PT-RZ31K

PT-RZ21K

Challenge

How to create a visually stunning, high profile projection across such a large and varied canvas, when space and power are at a premium.

Solution

Utilising Panasonic laser projection provided the required brightness, giving QED the confidence to avoid hot back-ups and to create a 17 projector blend with limited space and power.

“Panasonic is leading the way in laser-phosphor projection.”

Paul Wigfield

Director



"Every couple of years a great project comes along that truly inspires and challenges you," says Paul Wigfield, Director at QED. "The team at Hull 2017, the UK City of Culture, commissioned Heinrich and Palmer to create a projection onto one of the city's most iconic buildings, the Deep, a public aquarium on the banks of the River Humber."

Floe, a stunning bespoke projection piece, was created by acclaimed UK artists Heinrich and Palmer, and ran for three nights in December 2017.

Floe (virtually) remodelled the architecture and façade of The Deep and was the final commission in Hull 2017's Look Up programme of artworks in the public realm.

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The building was also used as the backdrop for the live announcement of the winner of the UK City of Culture 2021, broadcast on The One Show on BBC One.

"It really was the ultimate combination of technical and creative talents. QED produced the technical design that allowed Heinrich and Palmer to fully exploit the creative potential of the building and the environment," adds Paul Wigfield.

The extraordinary projection explored the nature and inspiration behind The Deep, from its unique design and structure, to its position today as a major visitor attraction and international conservation and research charity. The surrounding ground and slipway to the Humber Estuary all became projection surfaces, so for the first time the Deep was able to become one with the water, joining the sea and the building together.

"There is no way that we could have done this job to such a stunning level of brightness without laser projectors."

A total of 17 high brightness laser projectors were used to create the effect. 14 PT-RZ31K 30,000 lumens and 3 PT-RZ21K 20,000 lumens projectors were expertly positioned by the team at QED in order to ensure the entire building façade and surrounding area became a single flawless projection.

Using a mixture of film, bespoke time-lapse footage, modelling and mapping techniques, Heinrich and Palmer explored the material, form and surface qualities of The Deep. The projections charted the geological and biological processes which inspired the building and the rich aquatic life and environments within its walls.

"There is no way that we could have done this job to such a stunning level of brightness without laser projectors. We were working within the boardroom and on the balcony of C4DI, a local technology partnership organisation, so we were highly restricted in terms of floor space and weight loading.

"This is where Panasonic outperforms anything else, in terms of size to lumens output. We had to play a game of Tetris to get the projectors into the boardroom into a configuration that worked for the show we needed to create," adds Paul Wigfield.

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"The low power requirement and reduced heat was also incredibly important - lamped projectors in a boardroom of that size would simply not have been able to cope, and would have been incredibly risky.



The RZ21Ks were used for the smaller areas including the projection around the corner of the building which we delivered wirelessly," added Wigfield.

"We'd only taken delivery of the PT-RZ21Ks a few days prior to the start of the event, but having used the RZ31Ks over the past year we had complete confidence in them."

Anna Heinrich and Leon Palmer are two UK based artists who have worked in collaboration since 1991.

Their artworks range from photographic and light installations to large scale projection events and public art interventions.

One of the biggest challenges for Floe at the Deep was the multitude of different textures on the surface of the building and the surrounding area. A large reflective metal strip across the centre, white concrete, dark concrete, seaweed, algae, rusty corrugated iron, glass and tiles that all needed to be accommodated and balanced for brightness and contrast.

"It was in many senses a classic projection mapping project, using traditional perspective and trompe l'oeil effects, but also by incorporating 4K video footage taken from within the Deep. Heinrich and Palmer were literally able to bring the inside to the outside," says Paul Wigfield.

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"In Hull it was not physically possible to install back-ups, but at no point was I concerned that they might fail. With lamp based projection technology this would simply have been unthinkable. For sure, laser is the future."