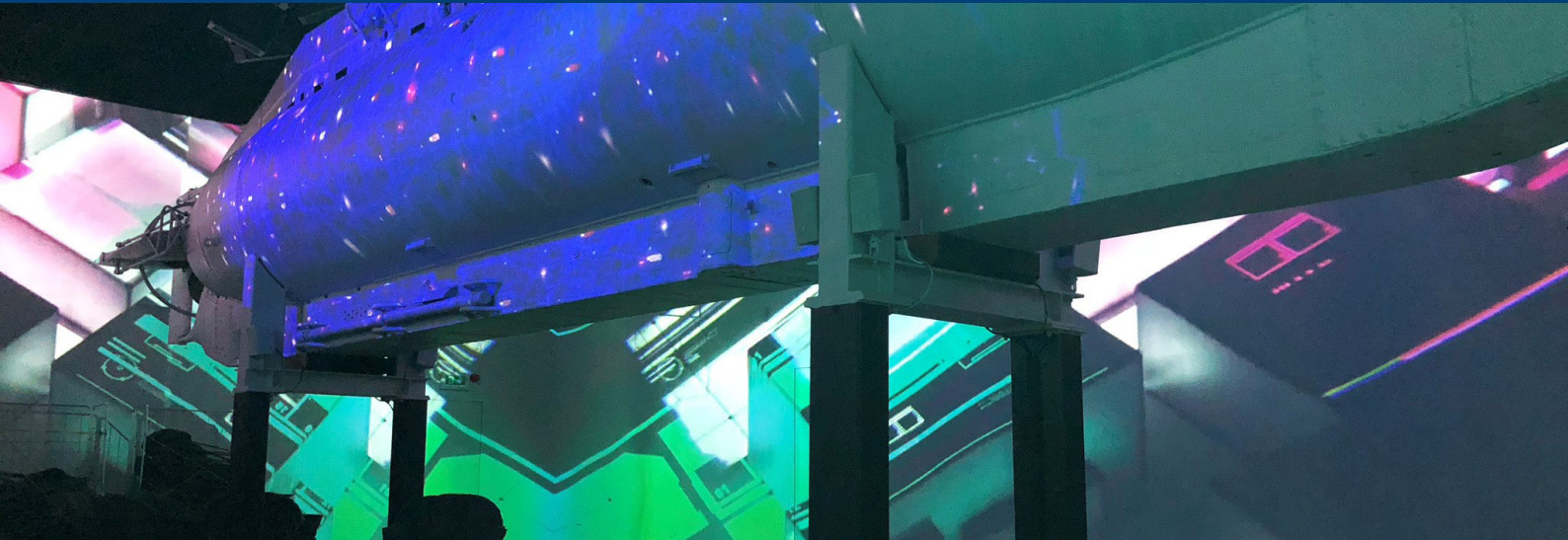


NEC Display Solutions Customer Installation Leisure and Museums

# Scottish Submarine Centre

Immersive experiences through projection mapping



Bringing the 'inside out'; projection mapping and VR technologies recreate the lives of submariners, projecting the inside workings of a submarine onto the outside of this museum's single major artefact.

## SITE INFORMATION

### Sector

- Leisure and Museums

### Client Information

- Scottish Submarine Centre,  
Helensburgh  
[www.scottishsubmarine.com](http://www.scottishsubmarine.com)

### Partner Information

- HI Audio Visual Ltd  
[www.hiav.co.uk](http://www.hiav.co.uk)

### Installation date

- Summer 2018

### EQUIPMENT

- 26 x PX803UL, 8,000 ANSI lumen laser projector with NP31ZL wide zoom lens



The fulfilment of a vision to put Helensburgh on the map as a centre for sub-maritime heritage, the Scottish Submarine Centre aims to honour the legacy of the Royal Navy's submariners. Founded by long-time Helensburgh resident and volunteer Brian Keating, the centre has become a cultural hub for the town, providing educational experiences and a multi-use function venue, resulting in a boost for local tourism.

## The Challenge

The availability of HMS Stickleback, a Cold War X51 mini-submarine, became the inspiration for the now permanent centrepiece at the Submarine Centre. Too small for visitors to get inside, the challenge was to create an attraction around a single artefact. The answer came in the form of the latest audio visual techniques, with laser projection becoming the means to tell a myriad of stories.

Glasgow based AV company, HI Audio Visual Ltd, played an integral part in the realisation of Keating's foresight, they specified NEC laser projection as the most capable technology to deliver the required result.

## The NEC Solution

The submarine is positioned in the middle of the museum space, a total of 26 x NEC PX803UL laser projectors with NP31ZM wide zoom lenses project onto all four walls plus both sides of the submarine creating a truly immersive experience.



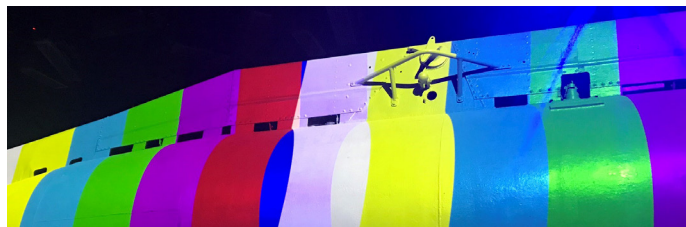
*"NEC's laser projection was an obvious choice where low maintenance and plug & play reliability were a critical part of the operational viability of the centre,"* says Brian Keating.

AVStumpfl Wings provide the video processing and image warping with signals distributed by Extron fibre extenders. The room has a 32.4 surround audio system from JBL speakers, BSS Audio SoundWeb processors and Crown Audio digital amplifiers.

*"The audio visual configuration allows the space to be multi-usage, mainly for the exhibition and visitor oriented shows, but also for corporate events and other functions",* says Ken Callen, managing director of HIAV.

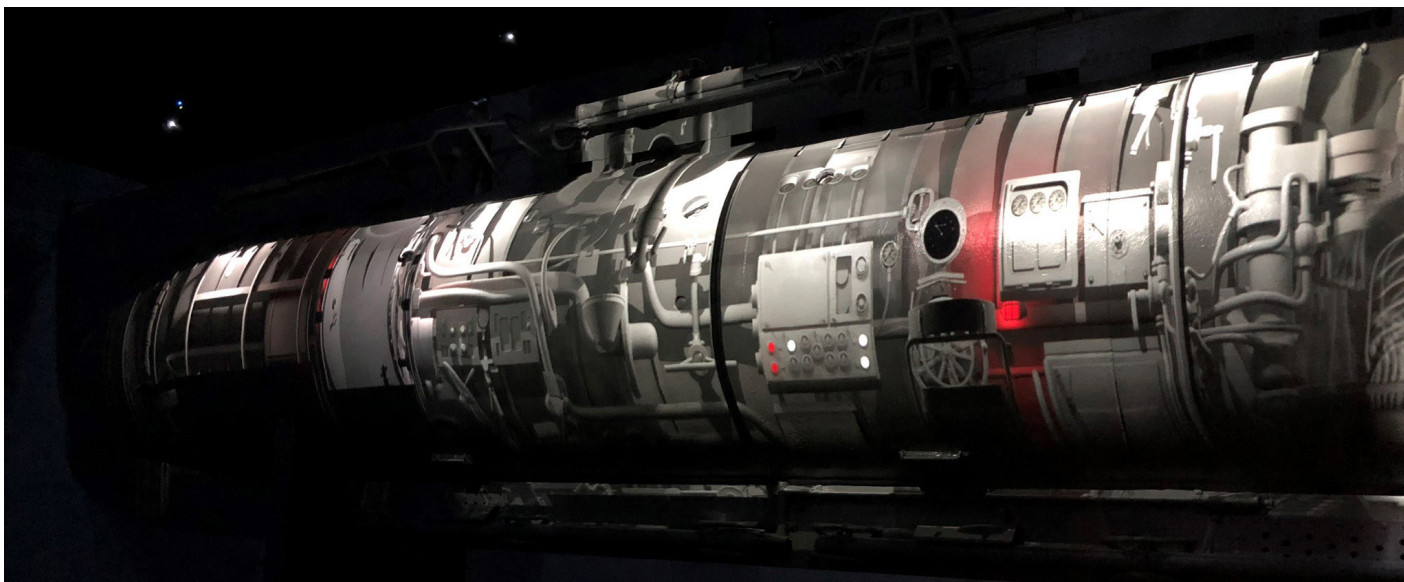
## The Result

An instant hit with visitors, the first digital story to be delivered at the museum is that of the X51 itself, its history, how it operated and how it came to end up in Helensburgh. But this is just the beginning. With information and stories being donated by the families of submariners, there is endless opportunity to present different angles on the sub-maritime theme keeping the exhibition fresh for repeat visits. Beyond this, and wishing to expand links with local communities, the AV set-up lends itself to flexible usage.



*"We have plans in place for a variety of different applications including staging plays and other cultural events,"* confirms Keating. *"Local businesses also recognise the value of hosting corporate events here, offering delegates added-value. I'm really excited for the future and very proud to have played my part in the revitalisation of the town centre and honouring the Royal Navy whose submarine fleet has been relocated to nearby Helensburgh."*

The centre is anticipating welcoming over 20,000 visitors in its first year.



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