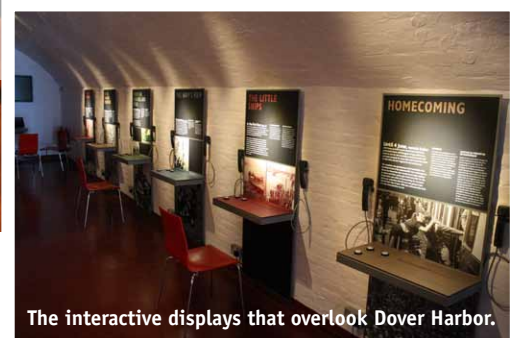


AV DESIGN PROJECT PROFILE



Secret War Time Tunnels, Dover



The interactive displays that overlook Dover Harbor.

Extensive use of AV technology recreates the drama of the Dunkirk evacuation

Situated in the network of 60-meter long secret tunnels, 26-meters deep underground behind the famous White Cliffs of Dover, English Heritage's "Operation Dynamo: Rescue from Dunkirk" makes extensive use of audio-visual technology to recreate the drama of the Dunkirk evacuation. Denmark based Kvorning Design & Communication designed and produced the new attraction and Electrosonic was the AV systems integrator. Kvorning selected Electrosonic to work with them from the initial design stage, to help validate design ideas, until completion. Throughout the project Electrosonic faced some difficult tasks, including dealing with the underground climate and projecting images into spaces where no surface is straight.

"Providing a series of audio-visual experiences in the listed tunnels underneath Dover Castle has presented some very unique challenges," says Dirk Bennett, acting head of interpretation at English Heritage. "Electrosonic has provided the expertise, experience and creativity to come up with solutions which will

create an immersive and exciting experience unique in the area of heritage interpretation."

During the design phase, Electrosonic's Design Consulting team worked with Kvorning to determine the audio-visual solutions needed to meet their creative designs. The design works included 'audio-visual and control design' in sufficient detail to allow reliable budgeting and form the basis of tender documents. Other services included equipment specification, technology demonstrations, 3D CAD techniques and facility impact documentation.

"Kvorning Design & Communication has worked in close and positive collaboration with Electrosonic on the AV installation in The Secret Wartime Tunnels in Dover," says Arne Kvorning of Kvorning Design Communication. "The experience is absolutely breathtaking, bringing the history of the tunnels to life."

The attraction takes parties of up to 30 people at a time through eight zones featuring original newsreels,



recordings, veterans' testimonies and special effects, which portray the rescue of the British army from Dunkirk. The show commences in "The War Begins" cinema, an underground briefing room where Electrosonic designed a mock 16mm projector and blackboard, the latter is actually an LCD panel covered in black gauze, which displays the events leading to war.

The Battle of France presentation features a projection system, designed by Electrosonic, to display archive footage and animated graphics of the battle onto two walls and a table in the form of a truncated pyramid in the center of the room. The images spill over the pyramid sides as the presentation reaches its climax.

Set in one of the 60-meter long tunnels is the highlight of the attraction, "Rescue from Dunkirk Casemate Z." A computer controlled projection system designed by Electrosonic blends and warps 23 separate projected images into one giant image spanning the entire length of the tunnel. Spectacular lighting effects augment the projections, which include fighter planes that appear to zoom down the entire length of the tunnel against a backdrop of ships and small boats. In another sequence, silhouetted photos give the eerie feeling that those planning the evacuation are still present in the tunnels.

Electrosonic's Design Consulting team designed the audio throughout the zones to meet the needs of Stouenborg, Kvorning's sound designer. In addition, Electrosonic designed the interactive displays that overlook Dover Harbor in the exhibition space above the gift shop; a series of listening points allow visitors to hear the oral testimonies of veterans.



The underground briefing room where Electrosonic designed a mock 16mm projector and blackboard.