

POLAR

READING UNIVERSITY GREAT HALL STEERED TO AUDIO CLARITY

This Grade II listed building, which hosts a variety of high profile university events, was bedeviled by poor sound until the Vice-Chancellor decided that 'enough was enough'. In search of an effective and discreet solution, the university engaged POLAR to determine the best way forward.

Reading University is a globally renowned institution. Ranked amongst the top 1% of universities in the world, its reputation for teaching, research and enterprise is formidable. By any measure, the university is an exceptionally strong educational establishment as well as being home to some of the country's most beautiful campuses and a number of heritage buildings. It was in respect of one such heritage site that the university contacted POLAR, seeking a solution to an audio headache on a grand scale.

The Great Hall, is a Grade 2 listed building which hosts a variety of events, not least of which are graduation ceremonies for thousands of students. In response to a growing number of adverse comments in relation to the poor audio quality at such events, the university's Vice-Chancellor took the decision to improve things. Having previously enjoyed a successful working relationship with POLAR, the university again sought the company's advice over the best available solution. The system was primarily to offer voice reinforcement and on occasions, musical playback in a reverberant space with a high curved ceiling approximately 25m x 15m. The heritage nature of the hall also demanded that it be as discreet as possible in order to avoid compromising the beautiful interior. Following an initial site survey, POLAR made certain recommendations and the university commissioned a demonstration to interested stakeholders from its conferencing and events sectors. All parties were impressed and the go-ahead was given for integrators Snelling Business Systems to commence the installation.

POLAR supplied 2 Renkus Heinz Iconyx IC-24 speakers as the basis of the solution. These digitally steerable line array loudspeakers are controlled via software to create beams of audio which can be directed to give an even coverage of intelligible sound in the most demanding acoustic environments. Just as it is possible to focus the sound on the audience, so too it can be steered away from the hard reflective surfaces of the space (and in this example the cylindrical ceiling) to minimise reverberance. The Iconyx series ranges in size from the IC-8(smallest) to the IC-32(largest). As the speaker length increases, so does its ability to more sharply focus the audio on a listening area and 'throw' the audio over a greater distance. The IC-24s were deemed to be of the optimum size for the Great Hall, enabling the size of the space to be comfortably overcome whilst preventing excess energy from 'leaking' into the ceiling area. Whilst offering superb technical characteristics, the Iconyx speakers discreet aesthetic was also perfect for this beautiful heritage building. POLAR was able to arrange for the speakers to be custom-coloured, to further blend in with their surroundings and being 'active' there would be no visible amplifier racks with their attendant heat generation and energy consumption. A Biamp Nexia SP was employed for all signal processing in conjunction with a Mackie VLZ4 1202 12 channel mixer. All microphones for the system were from the beyerdynamic range.

Additional to the permanent installation of the Iconyx speakers, in order to cater for occasional music playback, a pair of AD-Systems i.Flex15BHP bass reflex speakers were supplied (powered by MC2 TI3500) as well as a single Flex 8 full-range speaker for onstage monitoring (powered by Australian Monitor AMIS250P). This system was entirely portable and so could be removed and stored when not in use.

Toby Wise, Managing Director of Snelling Business Services stressed the benefit of close co-operation:

"Working alongside POLAR always makes for a smooth operation and the installation at Reading University was no exception. They were thorough in their site evaluation and always at hand to consult over any issues that arose. There is no doubt whatsoever that the beam-steering capability of the Iconyx speakers has completely transformed the audio situation in the Great Hall."

QUOTE IN A BOX

"We've always had a very productive relationship with POLAR and they were our first port of call. The system that they designed has improved the functionality of the hall beyond recognition. Occasions such as graduation ceremonies had always been a major headache as regards sound - but this year everyone involved was full of praise for the clarity and audibility throughout the hall." Mark Taylor, Senior Technician, IT Services, Reading University.