

# Bath University

## Audio Visual Case Study

### Flexibility is key for Bath University



The University of Bath ranks highly in the league tables of UK Universities. Its research is internationally respected, and its students are in demand by employers because of the high quality of the teaching offered.

The University has had close connections with industry, public and voluntary sectors since its inception in 1966.

#### AV Requirements

In Spring 2008 the University undertook a project to totally refurbish the Main Council Chambers on the University Campus into a modern meeting and boardroom.

The requirement was for a totally integrated multimedia solution. The room needed to be flexible because it was used for several different types of meetings, including University Council meetings and Vice Chancellor's meetings. The University wanted the installation to have a minimum physical impact on the room, and wireless technologies were required to give added flexibility without cable restrictions.

The contract demanded the production and provision of all relevant CAD drawings and co-ordination with the University's IT personnel and other outside contractors.

#### The Solution

The main display devices for the area are two wall mounted 65-inch LCD displays, which are recessed into the acoustic cladding on the walls. This was recommended by Reflex because of the minimal impact on the room environment.

Another factor in the choice of display screens was the future requirement for Videoconferencing in the room, as well as the high ambient light levels due to the windows on two sides of the chamber.





A University supplied networked PC is installed in an equipment cupboard within the room. Whilst discreet and tidy, it allows for the easy loading of computer disks. Laptop connection points are recessed into each of four columns in the room, with a further connection provided at a lectern.

A DVD/VCR combination player sits in an equipment rack within the room with a document camera, which allows acetates, slides and 3D items to be easily displayed, sitting on top of the rack. Both items are controlled via a central control unit, which also controls all system switching, source selection, transport control and audio levels as well as system start up and shut down.

The installation was designed with future needs in mind, with hidden cabling infrastructure and system control and switching capacity to allow a Videoconferencing system to be fitted when required.



The installation called for a high number of input sources and associated audio. To cope with this, Reflex recommended an external matrix switcher to allow the source to be pre-selected before display.

Users control the system via an 8.4-inch WiFi touch panel. Its operating range ensures it can function anywhere within the room. The panel can connect up to local WiFi networks, where users can access either the Internet or the University Intranet directly from the touch panel.

As far as audio is concerned, the room has two ceiling mounted omni-directional microphones which gives coverage of the entire room in all configurations. Additionally three wireless microphones are installed, which run on distinct and separate frequencies so they can operate simultaneously.

All the microphones are controlled via a digital microphone mixer matrix that also provides acoustic echo cancellation for the system. This maximises the audio quality and pick up of the microphone system before mixing it with the room audio from its input sources.

Audio is relayed to the room via a series of wall mounted speakers. There is an "Always Live" induction loop system situated under the carpet which has no impact on the room environment itself.

Audio in the room can be recorded and played back for future review.

## The Results

The project was overseen by **Peter Clark, the University's AV Manager**. He says "Following the issue of a brief to several integrators, Reflex came up with an innovative system design and cost effective solution which resulted in them being awarded the contract.

The project incorporated a major structural build and complicated M+E installation and had to be delivered in a tight time period. Project management was always going to be the key to success. Throughout the project Reflex's Project Manager managed the installation and liaised fully with the University and outside contractors.

The entire Reflex installation team were thoroughly professional throughout, this was a 'happy project' to work on and they delivered a high quality AV installation, the design and finish of which enhanced the success of the overall project, and they delivered it on time and to budget."

