



## A ROYAL EVENT

As the world switched on to enjoy the wedding of the century, a Crestron-controlled audio system helped ensure every word, hymn and vow was audible during the ceremony.

It's the wedding of the century and all eyes and ears turned to Westminster Abbey on Friday, April 29, 2011 as Prince William and Catherine Middleton tied the knot. Every minor detail of the ceremony was carefully planned with the ceremony benefiting from The Abbey's replacement speech reinforcement system completed in time for the 450th anniversary of Queen Elizabeth granting a Royal Charter to The Abbey in 1560. The system was also in place for The Pope's visit to The Abbey at the end of last year.

The work carried out at The Abbey (more officially known as The Collegiate Church of St Peter in Westminster) included the installation of speech

reinforcement, induction loop and CCTV systems along with video, audio and data distribution facilities. Audio, video and control systems were fitted by Winchester-based Whitwam Ltd, whilst Thame-based Albert Walker Electrical Ltd handled the cabling. The Consultants were Michael Hyland & Associates and the entire project was under the supervision of The Abbey's Clerk of the Works.

Westminster Abbey is one of the most famous buildings in the world – it is a building steeped in more than a thousand years of history. Benedictine monks first came to the site in the middle of the tenth century, establishing a tradition of daily worship which continues to this day. The Abbey has been the coronation church since 1066 and is the final resting place of seventeen monarchs.

Overall control of the audio, video and related systems by the Vergers is by means of Crestron

touchscreens which have been located in various areas so as to maximise flexibility. A further touchscreen by the organ console gives control of the audio and video elements which are specific to The Organist. The Crestron AV2 processor provides control over the various audio elements of the installation, along with CCTV cameras, audio and video recording and replay equipment. In addition to a fixed TPS4000L touchscreen at the user rack, Vergers can control the system by means of a portable TPS4000 screen, which can be plugged in at a number of locations. There is also a TPMC 8X wireless touchscreen, which is used throughout the main areas of the building. An internet link has been provided so that the system can be remotely managed. Critical parts of the system are monitored and, in the event of a failure, details are automatically emailed to the installers.



Extensive workshop testing of the systems' racks was carried out so as to minimise the amount of site testing required once the elements were installed. Installation of the systems was implemented so that there was no impact whatever on the building's daily services and the various other events for which The Abbey is used. Also, steps were taken to ensure that the work did not disrupt the routines which are in place to deal with the many visitors who tour The Abbey daily.

On account of the morning services, 12.30 Eucharist and Evensong, contractors' working hours were from 8.30 to 12.30 and 1.00 to 4.30. Evening access to the building was limited on account of the various activities which occur once the building has closed, eg organ practice, conducted tours, special interest group visits and rehearsals. On the evenings set aside for commissioning, access was sometimes not possible until 9.00 pm.

The project was programmed so that it was possible to implement the changeover from the old to the new facilities without interfering with services. Since the systems were commissioned, they have been in use for the regular services, along with concerts, drama performances, lectures and TV broadcasts – and of course, the world watched as the Royal Wedding took place on Friday 29 April, 2011.

A major part of the site work related to the cable requirements. New cabling was installed throughout for microphones, line level, loudspeakers, video and data. The historic nature of the floor meant that it was not possible to establish new cable routes beneath it. Existing routes, mostly in heating ducts, were re-used and extended slightly where necessary. Most of the horizontal cable runs are at Triforium level, on a cable tray suspended from the underside of the roof. On account of the working height involved and

floor loading issues, it was not possible to use access equipment such as hydraulic platforms and scaffolding towers. Instead, abseilers were used to install all of the vertical cable runs.