Wedgwood Museum

Adder Provides Crystal Clear Video for Blackbox-av Installation at Wedgwood Museum

CHALLENGE

When people think of Wedgwood, they think of the china patterns of English royalty. And rightly so. The Wedgwood Museum houses a unique record of the entire history of the Wedgwood ceramic company, from the early 18th century to the present day. The collection was first displayed to the public in 1906, but by 2000 it had far outgrown its existing premises.

The size of the museum wasn’t the only issue. It was too antiquated, and while it was housing history, its supporters wanted Wedgwood to represent innovation. They wanted the facility and its capability to be as grand as its content, as well as be highly functional and employ interactive educational tools.

Eight years later, the new museum was dedicated, and opened its doors in October, 2008. The new futuristic museum houses some of Britain’s rarest treasures, with contemporary design, multimedia interpretation, and interactive displays. In total, the museum holds around 6,000 Wedgwood artifacts, some of which have never been seen by the public before. It also houses more than 75,000 original manuscripts. The sweeping complex at the heart of the Wedgwood factory is expected to attract over 100,000 visitors a year from around the world.

Imagine all these artifacts and manuscripts accompanied by interactive screens, so guests can learn about the collection. For such an attraction, it was imperative that it function smoothly, elegantly, and interactively. The museum, above all else, needed to look, feel, and behave like a futuristic view into the past. It also needed to be stable and usable, as an interactive archive.

The challenge would be to impose control over touch screen and other interactive displays, without interfering with the clean lines and design of the museum.

The museum’s elegance could not be compromised, so the potential for messy wiring and noisy PCs was not an option. All wiring needed to be hidden, the galleries free from ambient buzzing sounds. The quality of all video and audio needed to be stellar.

SOLUTION

Blackbox-av Ltd was commissioned to supply and install a challenging IT solution that met the museum’s require-ments. To run the widely dispersed interactive kiosks and displays dotted around the museum, they need 40 PCs. Imagining 40 PCs crowding the very carefully architected galleries did not appeal to the Wedgwood museum designers.

So rather than have these PC hidden within the museum cases, tucked into nooks and crannies, or housed in units, they decided to house all the controlling PCs in one central, air conditioned, IT computer room.

The museum designers, Ivor Heal Design Ltd., included an “Information Ribbon” than ran the throughout the length of the galleries.

This used a specially designed low level cabinet system to provide interpretation throughout the museum using a variety of different offerings including touchscreen systems, interactives, graphic panels, text panels and hands-on tactile exhibits.

The central control room and Information Ribbon meant the museum’s intricately designed galleries were left intact. But they presented Blackbox-av with a technical challenge, because some of the displays could be up to 150 meters from the PC actually running the presentation.

Wedgwood was not willing to compromise aesthetics, but they also weren’t willing to compromise video clarity or sound quality. It had to be impeccable, even over these extended distances.

Blackbox-av found Adder technologies best suited for video and image clarity. Blackbox-av selected the AdderLink X-USB, part of the AdderLink X series, which is best known for its high quality video, full speed USB and high quality audio extension.

The Anatomy of the Control Room & Networked Interactive Kiosks

Blackbox-av installed nearly forty rack-mounted PCs in the control room, providing content for a variety of display units around the museum, including conventional projectors, ultra short throw projectors, LCD monitors, Touchscreen systems and audio information points. Any one of these could be located up to 360 feet from the control room.

Each of the displays lends itself to a different level of stability, and differing operational characteristics.

Each PC and display unit is connected to the AdderLink KVM Extender device, which enables long distance communication across a CAT5 network cable.The CATx cables are much thinner and easier to manage than more traditional bulky KVM cables, which are cumbersome to route around and under racks, and equipment shelves. If you pile up the number of KVM cables you may need to connect, say, 10 computers, the space that traditional cables occupy can be quite astonishing. With more computers, the problem just gets worse.

In comparison, CATx cables take up relatively little space and have the advantage of being disconnected at both ends, neatly fed through small holes, and routed easily around corners.Another space saver was the fact that 16 extenders could be rack mounted into a 2U chassis, which fit nicely into the control room.

Each receiver unit has a built in 4 port USB hub to enable a complete desktop to be located remotely, including akeyboard, monitor, mouse, disk drive, flash memory stick, webcam, and any other device that would normally be plugged into a computer’s USB port.

These AdderLink KVM Extender devices ensured that the response time of the interactive kiosks was lightning fast with minimal compromise to quality. So when a visitor pressed a button or touched a screen, the video was immediate and able to illuminate the intricate details of Wedgwood china.

The Blackbox-av programmers developed and installed software-based control systems for the control room, in order to enable Blackbox-av to remotely manage the whole system. They also installed an easy-to-use graphi-cal user interface for the curators to locally manage the system.

Finally, they installed a range of presentational equipment in the attached education suite, including projectors and a portable lectern control suite.

RESULT

These AdderLink KVM Extender devices ensured that the response time of the interactive kiosks was lightning fast with minimal compromise to quality. So when a visitor pressed a button or touched a screen, the video was immediate and able to illuminate the intricate details of Wedgwood china.

Also, museum curators and management were up and running in no time, because there was very little learning curve associated with using the system.

The capabilities of the Adder KVM devices enabled Blackbox-av to fulfill the challenging aesthetic requirements of the designers to conceal as far as possible the systems and electronics running the show.Their small size and amazing functionality were key in enabling Blackbox-av to deliver the designer’s vision for the new museum.