GALLERY

Helvar

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Products:

HES 92020
HES 92220
HES 98020
DIGIDIM 920 Router

Solutions:

LED, Energy efficiency, full integration with BMS, time scheduling

Historic portraits seen in a new light with Helvar

Home to the world's largest collection of portraits from the middle ages to the present day, the National Portrait Gallery is one of London's most popular visitor attractions. With two million visitors every year, its packed schedule can make any refurbishment work a major challenge. Over the past six years the Gallery has been making the transition from tungsten halogen lamps to Light Emitting Diode (LED) lighting. The installation has also included an upgrade of its exiting Helvar lighting control system with a new, more modern, solution.

The National Portrait Gallery had a lighting control system in need of some updating. Work first began in Room 13, which currently exhibits portraits focussing on some of the key figures in scientific and industrial developments in the 18th Century. Helvar's lighting control solutions were specified alongside ERCO's 14W Optec LED spotlights which also required a lighting track change from 4 circuit to the modern standard of 3 circuit setup.

The refurbishment will see Helvar's 920 router's installed with over 200 dimmer units. HES 98020 Ballast Controller modules are all fully integrated into a bespoke building management system (BMS). For the top lit gallery areas, the custom BMS is able to carefully monitor the brightness of natural light coming through the windows whilst tracking the sun's position and measuring the sky's brilliance, enabling the blinds to open and close whilst also dimming the lights up and down, adjusting to the amount of natural daylight filling the areas. Automatic time schedules are programmed into the BMS system to enable the smooth transition of lighting control throughout the day and night.

National Portrait Gallery Chief Engineer, Allan Tyrrell, who oversaw the project says "In Room 13, we wanted to have a like-for-like replacement of the lighting, the original 100w tungsten halogen lamps were exchanged for 14 watt LED's. Room 14 was used to trial Helvar's lighting control solution which worked alongside ERCO's luminaires enhancing the light's ability to accurately reveal reds in paintings such as the portrait of the Duke of Marlborough". "The new lighting shows off much more detail in the paintings than had been visible previously" says Allan. "With the

installation of the LED's, we have had no complaints regarding the lighting from the public. One of the benefits of dimming LED luminaires vs halogen luminaires is a constant colour temperature, the colour seen in the paintings stays exactly as the portrait was intended by the artist".

With approximately 60% of energy savings, work will continue throughout the Gallery and into the offices to create a modern and comfortable place to work and visit. The next phase of installation is to replace the existing PAR lamps with new LED lighting technology on the first floor, a project that is now nearing completion. With careful planning and design the work carried out has taken considerable effort and investment, enabling the new system to be a huge success. Many galleries around the world have now chosen to utilise similar systems.