



NHS IPSWICH MORTUARY

COLOUR CHANGING LED LIGHTING HELPS
NHS HOSPITAL SUPPORT BEREAVED
FAMILIES AND FRIENDS

LEDextra
PREMIUM COMPONENTS

ABOUT THE CLIENT

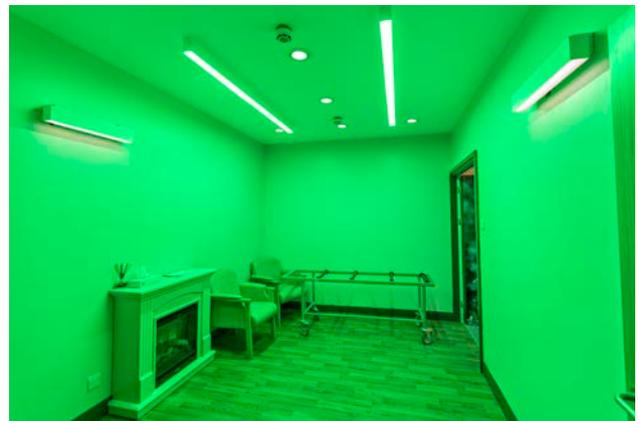
During Dying Matters Awareness Week, Ipswich Hospital unveiled its renovated mortuary facilities to help bereaved relatives say farewell to their loved ones in a “reflective and relaxing space”.

The £100,000 upgrade was funded through donations made to the hospital’s charity and is now complete with improved disabled access, advanced colour-changing lighting and a garden with a brand-new patio and plants.

Ipswich Mayor, Sarah Barber, who is also a paediatric nurse at the hospital, inaugurated the renamed “Rosemary Suite” and was an active participant in the Dying Matters Awareness Week which encourages a helpful dialogue about death and bereavement. The mortuary’s new design was to demonstrate the NHS’s commitment towards improving its service to the British population not only medically, but in the form of emotional support.

Chosen for their excellent reputation as longstanding and trusted suppliers of the healthcare sector, Dextra Group plc were once again glad to help the NHS improve its service to the public - adding quality and value for money with its future-proof and sustainable solutions. Having been involved in a varied list of projects ranging from eye clinics to dental surgeries, Dextra’s in-house technical and design teams had a new and delicate challenge to add to its portfolio.

LEDextra, a subsidiary of Dextra Group plc, specialises in the specification and supply of a broad spectrum of high quality LED lighting systems for all occasions and environments, specialising in colour changing solutions. In partnership with KLH Architects and Turner’s Construction, LEDextra was appointed by hospital Project Manager Georgina Powling, to design, manufacture and deliver an installation that would utilise state-of-the-art LED technology to make this difficult time a little easier.



THE BRIEF

Research continues to show that lighting has a significant impact on our mood and emotions. With this in mind, the lighting design for Ipswich Mortuary's family and viewing rooms was to use coloured lighting to make the patient look more natural to reduce the distress of identifying the deceased.

From a more technical standpoint, the new lighting needed to offset different kinds of skin discolouration that often occur post-mortem, such as pallor, hypostasis and jaundice, as well as conceal the appearance of blemishes, by introducing precise colour mixing and dimming functions that can be easily and reliably applied as staff see fit. The goal was to minimise the shock for relatives and preserve patient dignity; adapting to their needs in real time.

Colour-changing functions aside, the lighting would need to provide basic illumination levels at all times in accordance with CIBSE Lighting Guide LG2 – 'Hospitals and Health Care Buildings' guidelines.

LED sources have come a long way from simply offering outstanding energy saving properties. With the latest LED sources and lighting control components, LEDextra provides bespoke and highly controllable solutions, that offer impressive light quality with a vast selection of colour and dimming options. High-quality LED systems no longer require users to compromise sustainability over suitability.

With funding opportunities such as these being few and far between, Ipswich Hospital needed to invest in lighting that would perform reliably and efficiently whilst keeping future maintenance and energy costs to a minimum. High-quality LED solutions will provide an average of 70% reductions in electrical load compared to most HID or fluorescent equivalents. The addition of intelligent sensor control can reduce the total energy usage by an additional 30%.



THE SOLUTION

Runway Surface / Suspended & Protec LED

Simplicity, Elegance & Versatility

The Runway LED is designed to balance function with form. The simplicity of its slimline anodised aluminium housing and elegant matt finish (available in black, grey or white) offers a contemporary minimalist aesthetic, which has proven ideal for a variety of applications across many different sectors.

For the viewing room, surface-mounted luminaires were installed on both the ceiling and the walls. To flood the room with coloured lighting when family and friends visit, two 2000mm long Runway LED luminaires were installed with high powered RGBW LED light sources. Unlike conventional RGB lights, RGBW incorporates an additional white chip alongside the existing red, green and blue to allow the light fitting to be used as general lighting as well and coloured.

High-Performance and Energy-efficiency

The Runway incorporates the latest mid-power Lumileds LEDs to ensure optimal energy-efficiency with minimal maintenance over its entire lifetime. The 4244lm luminaires used (non-RGBW) offer a high light output ratio (LOR) thanks to its efficient opal diffuser whilst operating at an efficiency of 112 Llm/w.

The Runway RGBW is DALI (Digital Addressable Lighting Interface) allowing the fitting to be easily controlled with standard lighting control systems. Unlike most other colour change products, that require expensive standalone control systems.

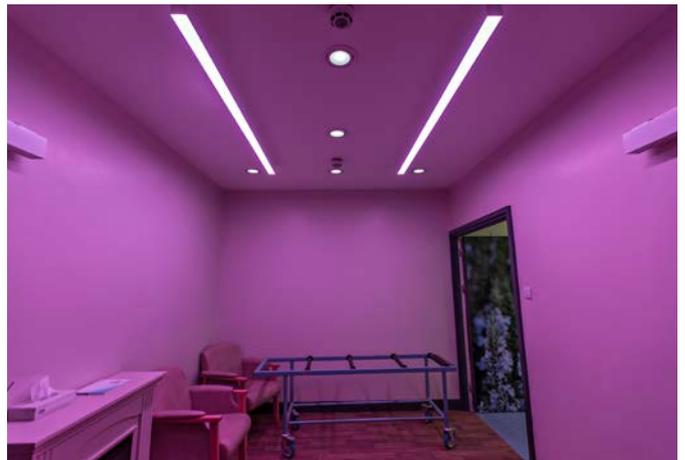
The wall-mounted Runway luminaires on the other hand, served as general lighting helping to achieve the desired Lux level and uniform light distribution, to maintain safe levels of visibility at all times.

The Protec LED downlighter was also used to fulfil a more practical lighting purpose by providing even coverage and the correct illuminance levels whether the RGBW luminaires are in use or not. For the purposes of the viewing room, 4000k (C84) "cool-white" LED sources were provided for a fresh and relaxing ambience with matching white bezels to suit the new décor.

RAKO Wireless Lighting Controls

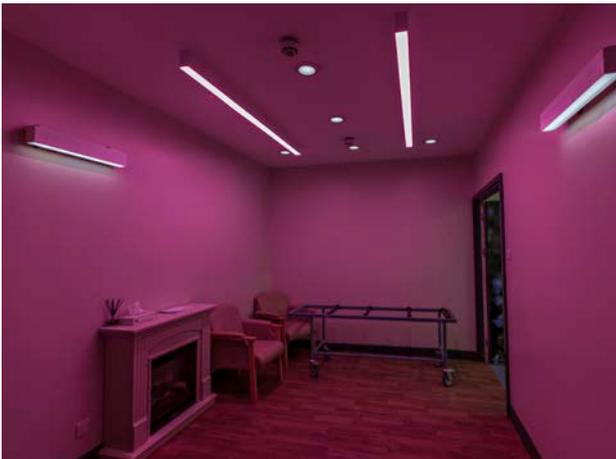
Lighting controls were the focal point of the installation. All luminaires installed were DALI addressable and controlled by high-quality RAKO wireless equipment. By opting for a wire-free control system, Ipswich Hospital can now benefit from the flexibility of DALI control options as wireless data transmission eliminates the need for the additional wiring required for a traditional DALI installation. The fittings only required a live, earth and neutral wiring connection and without the need to modify the existing cabling.

Luminaries were then connected to the RSR-DALI wireless receiver module which offers control of up to 15 addressable channels and 64 DALI devices. The user interface is simply an RCM100 (10-button switch plate) which is pre-configured for 7 lighting scenes, off and master dimmer. Staff can also choose which combination of luminaires to switch on or off to suit the occasion. The wall plate controllers are powered by a lithium battery and are designed to be mounted anywhere. The system's Rakom coded radio transmission eliminates the need for any data or power cabling, making installation a hassle-free and cost-effective.



THE RESULT

Staff at Ipswich Hospital have full control of the viewing rooms lighting. The user-friendly and highly accurate controls will allow them to explore an array of different options to better suit visitors - treating each occasion with the utmost care and attention to detail. In addition to saving money on the initial installation it will save the hospital any further commissioning or programming costs in the future.



"We are really pleased with this upgrade, which provides relatives with a more welcoming environment in which to spend those last precious moments saying goodbye to their loved ones."

"The family room has been transformed into a reflective and relaxing space, while the visitors' room has been made more homely and fitted with special lighting. The outside area has also been completely transformed, with new planting and a patio added."

Shane Mongor, Hospital Mortuary Manager.

FEATURED PRODUCTS



RUNWAY
SURFACE/SUSPENDED



PROTEC LED