

## Product profile

EMMA DAWSON-TARR, managing director of the fibreoptic lighting specialists Absolute Action, explains how this lighting method makes for better display illumination

There are few places where the consideration of lighting is more crucial than in the world of heritage for this is where the incorrect use of lighting can cause irreversible damage to many treasures of our past. Regrettably, some of the earliest lighting installations have resulted in text fading into illegibility and fabrics drained of their colour.

It is of course, vitally important that conservationists demand higher standards of lighting, and the industry has responded by developing new technology to provide creative display lighting that is now dynamic; effective and sympathetic to both the conservator and the viewing public.

So how can the conservator or museum curator achieve good lighting, and allow proper viewing of ancient artefacts without causing damage to these items by the process of illumination? Of all the options available to lighting designers today --' to satisfy both aesthetic and conservation criteria - few bring such reliable solutions with such little risk of danger, damage or intrusion as fibreoptic lighting.

### Designed for the task

The benefits of this lighting stem mostly from the system's ability to drive multiple light outputs from a single source. Not only does the heat and electricity remain remotely from displays but the light that travels along the fibre is also filtered from more damaging ultra- violets and infra-red rays. Also, the light outputs are extremely small and unobtrusive, and therefore Basil) accommodated into

# Preserving our heritage with the right lighting



existing display structures for glare-free, sympathetic lighting.

By contrast, the ubiquitous dichroic lamps regularly used for display lighting suffer from emitting dangerous ultra-violet, running hot and therefore having a detrimental effect on the items on display. They also have relatively short lives, so needing constant replacement.

Perhaps one of the most important developments for the museum and heritage market is a new track lighting system developed by our company. Its physical benefit is its ultra-slim profile, being just 50mm x 3mm in cross-section and designed to take miniature individually controllable light heads along its length.

The track system is so compact that it can run along the sides and uprights of display cases in cabinets, and so provide completely unobtrusive lighting. Equally, the same miniature track system fixed to walls or ceilings will provide illumination of objects or

paintings on display. Whatever the case, the single remote light source or projector that has the ability to power up to 30 light heads is easily accessible for relamping when required, and allows display cabinets to be left sealed without disturbance.

Each of the individual light heads has been designed with a pivoting ball movement for complete adjustment, and the optical lens holder is threaded for focusing; with three types of lens available to enable a range of illumination options. This means that there is the versatility for readjustment of light heads by staff when changing displays, and as there is no heat or electricity at output it's completely safe and displays remain in a cool environment.

Track lengths are available from 250mm to 1,800mm, and light source projectors can be specified with various lamp types from high intensity 150w metal halide through to low intensity 50w halogen. All of these 'spectral' projectors

optionally feature a newly introduced gradient dimming system that brings a gradual dimming control to fibre optic lighting for a seamless dimming process that can be timed and controlled as required.

### Significant schemes

Such fibreoptic lighting systems have been used to great effect in this country and abroad. Many installations, have taken place in America, notably in the Washington & Lee University in Virginia, commemorating the life of Robert E Lee, the general who led the confederate army in the American Civil War; the George Washington Museum at Mount Vernon, where George Washington lived; the National Museum of Natural History at the Smithsonian Institute in Washington, where fibreoptics light the Hope Diamond and the Dresden (Green Diamond); and most recently, the new Meteorite Gallery at the American Museum of Natural History in New York.

In this country, as well as at regional UK museums, Absolute Action has provided lighting for the Royal Ceremonial Dress Collection at Kensington Palace, winning an Interpret Britain award, and also for the interactive predator exhibition at the Natural History museum. What really sets these installations apart -- over and above the widely recognised benefits in maintenance and conservation -- is that they start looking great and stay looking great. Once final focusing of the light heads has been completed when an exhibition is first put together, they need never again be disturbed, remaining as perfect as when they were installed. \*

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