

heritage development



kensington palace

fibre optic lighting in action

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Costume displays so dim you can hardly see them?
It's not like that at Kensington Palace

Light fantastic

COVER PHOTO:
Nigel Arch,
Director,
Kensington
Palace

The new display of the Royal Ceremonial Dress Collection at Kensington Palace State Apartments has an impressive air of measured order and serenity. However, what unfolds to the visitor today is a unique level of life and animation, despite the displays being completely static, which is generated by varied scene-setting options through the creative exploitation of contemporary lighting and control systems. This also allows the sensitive fabrics to be displayed under enhanced light levels which would normally send conservators hurrying to the "off" button – but which here, quite to the contrary, have the endorsement and support of David Howell, Conservation Scientist of the Textile Conservation Studio at Historic Royal Palaces.

Miniature fittings
are used in this
close-up
illumination

How can this be? As with many apparently simple realisations, to reach the current position

has taken many arduous months, and an intense concentration of experience, endeavour, innovation – and more than the occasional leap of faith. Critical to the success of the project was the initial vision from the Historic Royal Palaces Curator, which has been nurtured, shaped and energised by the dedicated services of a highly specialised project team.

The original concept was to re-stage the Court Dress Collection in a themed manner, and in a way which would involve the visitor almost in a personal participation in the preparations towards Court Presentation. To do so required the creation of atmospheric spaces, and rooms within rooms, each of which were then to be decorated and furnished in keeping with the images and narrative being portrayed. These in turn are populated by specially fashioned mannequins to demonstrate the costumes of the period.

Obviously, concern for the historic fabric of this important building was paramount. Being a Scheduled Ancient Monument, even the tiniest detail had to be approved by English Heritage. Imagine, then, the challenges surrounding the installation of major new wiring systems, the mounting of hefty glass screens, the ducting for fibre optic lighting, and the incorporation of control systems and presence detectors. The ease with which all this appears to have been painlessly achieved is a tribute to the skilful orchestration of the works by the project team which included Margaret Davies of Conservation Architects, Margaret & Richard Davies and Associates.

Another important concern was, of course, the proper conservation of the artefacts themselves – the costumes, textiles and associated period articles. As ever, the "display versus conservation" issue had to be reconciled. The solution, informed by nine months of intense research and experiments by the Textile Conservation Studio, has proved to be not only absolutely true to the conservation cause, but also a breathtaking exhibition in display lighting.

Fibre optic lighting technology has been pushed to new heights – and lengths. To remove any heat emissions and maintenance requirements from the glazed interior spaces, fibre optic projectors are located at up to 16 metres



from their output heads. Period furniture has been designed as receptacles for the projectors and the fibre itself runs, concealed within the glazing framework, at both high and low level.

Each of the display areas is illuminated by several separate fibre optic lighting systems. These, being individually of unique specification and with their own independent controls, enable high and low level lighting of different intensities and colour temperature to bring texture and dimension to the various scenes.

The whole concept for new electrical infrastructure, display lighting design and conservation control was developed by Roger Grant of Building Services Consultants, Hannaford Upright. Working in consultation with Emma Dawson-Tarr of fibre optic lighting specialists, Absolute Action, the unique lighting scheme and system distribution was evolved. Critically, the development of a new control function for the fibre optics provides for completely smooth



Carefully balanced light from multiple heads is achieved during final commissioning

The first exhibition of costume opened at Kensington Palace in 1984. Some four years ago, serious thought began to be given to how to represent the collection to the public. From the start, there was a dilemma: how to balance the need for the protection of the fragile collection with the greater involvement of the public.

Market research emphasised the predominantly international, and female, nature of the audience for the Palace – although the hope is that the way the collection has been represented will appeal perhaps more to

men than previously.

Eventually, the concept which underpins the new exhibition took shape: not only to present this superb collection so that it can be appreciated and enjoyed from an aesthetic standpoint, but also to begin to answer those many basic questions which come to the mind of the average visitor. How were these clothes put on? What are they made of? Who made them?

Palace Director Nigel Arch is clear, and enthusiastic, about what he wanted to be the "feel" of the new



Prior to the new displays, cumbersome track lighting had caused discolouration (top left)



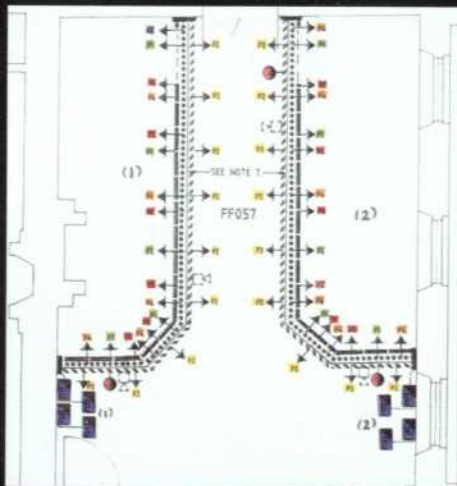
Now, fibre optic cabling runs concealed within the trunking of the showcase glazing (top right) ... while custom-made period furniture conceals projectors (bottom left and right).



gradient dimming of the light without shift in colour temperature or loss of light clarity. This, linked to a specially modified Dynalite control system, allows tour guides to uplift levels of illumination through various stages for scene-setting via the use of hand-held infra red controllers. Afterwards, the lighting automatically subsides to below conservation levels.

Close consultation with David Howell of the Textile Conservation Studio, combined with this innovative use of the latest technologies in lighting and control systems, has generated for this splendid collection a truly dynamic display. Not only can the viewer see the sequins and beads glittering in all their glory under clear, unfiltered light, but the overall cumulative illuminance levels are actually being maintained at well below normal conservation limits – currently estimated actually to be less than *half* standard museum levels.

All this latest technology equipment now resides discreetly within Kensington Palace's famous structure, and has been achieved with minimal intervention into the historic fabric of the building itself. Maximum viewing impact from the lighting can be realised with less than the overall exposure generally associated with low-level conservation lighting. A triumph of co-ordination between ancient and modern – and good news for today's curators everywhere.



ABOVE
The lighting plan for
Getting Dressed for Court

displays. He's very conscious that, at Kensington Palace, the visitor enters a "lost world" of the Court and its finery. The displays, therefore, aim to deploy the techniques both of the museum and of the theatre to help the visitor "share the magical world of Royal dress". A conscious effort has been made to "assault all the senses", with the carefully controlled use of light playing an important part in creating the right feel for each environment.

In the exhibition, the visitor passes through a series of formal tableaux, such as "Going to Court", interspersed with more everyday environments, such as a tailor's showroom and a dressmaker's workroom.

These provide the opportunity to display items of costume in a different context, and to involve the visitor, with bolts of cloth to be felt and touched.

In the tableaux, sounds and music – the rustle of silk, the murmur of voices around the corner – help lend an authenticity and immediacy to the occasions presented. The great formality inherent in the collections on display is, of course, a key feature of their impact, and Arch is conscious



that rooms such as that displaying the coronation robes of George V inevitably take on the status of "icons".

The exhibition is not conceived of as static and unchanging. The collection is constantly growing, and different aspects of it will be showcased in future years as part of the changing nature of the exhibition. And the wish to involve the public more with the Palace and its exhibitions is reflected in the new programme of evening Jazz Suppers in the historic Orangery – consciously designed to encourage the feeling of informality and accessibility. And put an end to the feeling that all attractions must close at 6 o'clock.

ABSOLUTE ACTION

Absolute Action has specialised in advanced fibre optic systems since 1983. With a record of acclaimed installations, the company has a worldwide reputation for innovation, quality, reliability and durability. A continually evolving range of fittings, fibre light guides and light sources is available to satisfy a huge diversity of lighting requirements - conservation, accent display, interior and exterior architectural and decorative applications. With a rapid-response design facility, flexibility and experience, even the most challenging requirements can be fulfilled with prompt and professional care.

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