Words by
Rachel Calton

LIGHTS, CONTROLS, ACTION

Entertainment lighting is becoming one of the most efficient ways of giving architectural and workplace design projects an edge

Light has been demonised of late as an escape route for copious amounts of energy, culminating in guilty clouds of light pollution and city hazes.

However, from a walk around The ARC Show (Architectural, Retail and Commercial Lighting) at London's Business Design Centre, it is apparent that, with developments appearing on the market at breakneck speed, it is fast becoming one of the most efficient – and effective – ways to give architectural and workplace design projects their edge.

And with ever-more compact control units putting complex lighting solutions at the fingertips of designers, entertainment lighting is increasingly working its way into architectural settings.

Take, for example, London's skyline and, perhaps most notably, BA's London Eye. Generally, an arc of bright white lights piercing the night sky, this landmark occasionally uses its prominent position on people's visual radar to penetrate London's collective consciousness. For Comic Relief last year, it lit up red in an attempt to ignite our charitable nature, and in February, it aimed to make the capital more amorous, with romantic pink lights reflecting over the Thames for Valentine's Day.

The technology behind the lighting of the wheel, which is provided by Pharos Architectural Controls, is ingenious. The lighting controller is a solid-state unit (you can shake it up and turn it upside down without effecting it – a bit like the anti-rolling mechanism on your 1985 personal cassette player, but better). It has an embedded PC, meaning that programs from a laptop can be downloaded on to it, and it will operate independently from there, running programmes "24/7" of its own accord.

Three of these devices (no larger than a transistor radio) attached to the London Eye, network together to operate synchronised lighting across the entire wheel, meaning there is not, as I liked to imagine, an operator in a control terminal, flicking switches.

Pharos's control systems are also behind the lighting of Tabard Square's barometer-controlled beacon, which changes colour according to temperature; the colour-changing O2 Riverwalk; and the external lighting at the National Theatre, among others.

Controls can be linked to anything from a barometric pressure sensor to an astronomical clock, which will trigger lighting to fade and brighten in sync with the sunrise and sunset, in whichever part of the world they are set to. ▶

Above left: The colour of the Steiermärkische Bank in Graz, Austria, changes colour at different times of the day and night

Above: GIA Lighting's reception illustrates how coloured lighting is being used to incorporate corporate identity into office design

Berkeley Homes

David Morrell

In February, the London Eye aimed to make the capital more amorous, with romantic pink lights reflecting over the Thames for Valentine's Day

Top right: The barometer-controlled beacons in Tabard Square change colour according to the temperature

Above: The London Eye was lit up in pink for Valentine's Day

Below: Devices no bigger than a radio can be used to control complex lighting displays

Pharos is also experimenting with a microchip that triggers changes in lighting and is compact enough to insert into small items or swipe-cards, enabling interactive environments driven by the customer or user.

Commercial director Chris Hunt says: "Without knowing it, we are getting more accustomed to having our environments lit in more innovative and attractive ways. The possibilities for interactive lighting in architecture are there. How you use it is up to the imagination."

As recently as five years ago, the suggestion of coloured lighting for offices was taboo, claims lighting designer, and creative director at GIA Lighting, Tanya Duncan. Now, coloured LED lighting is a popular way of incorporating corporate identity into office design and bringing company personality into spaces. "Colour change and effects lighting was borne from the theatre and entertainment industry, but there is a big shift towards it being utilised in commercial spaces," she says.

The key, explains Duncan, is flexibility. "We can set a pre-determined base scheme that moves through set colour patterns throughout the day or season. But if new tenants come in, or the company wants something different, we can come back in and introduce new colour schemes for them to work with.

"User friendliness of systems is crucial. As lighting control is much more logical, you can have a panel at a reception desk that controls a selection of lighting scenes throughout the day.

"As offices are increasingly used for corporate entertaining outside of working hours,

installation lighting can morph space, making it more conducive to people socialising. Changing the look of an environment entirely makes the space work a lot harder for the client."

With artificial lighting now available that mimics the variations of daylight, and our natural biorhythms to boot, dynamic lighting is also working its way into the equation.

"Daylight is changing in level and colour temperature throughout the day, and effects how we feel and perform," explains Philips area manager Karl Burke. "A bluer light, for example, is proven to increase our serotonin levels. This shade of light can be set to get stronger after lunch, and used in an office to counteract afternoon lulls, for instance."

Philips' "dynamic ambience", which runs according to a pre-programmed rhythm, has already been used to improve working conditions at Gateshead Council's contact centre and Green End Primary School, in Manchester, while iGuzzini has created a system for airport control rooms that maintains the correct chemical balance to keep the body awake.

With colour-changing, control-phasing lighting cropping up in places as diverse as the London Eye and office receptions, it is a clear sign that the link between architectural and entertainment lighting is being bridged. ⊠

www.thearcshow.com
www.pharoscontrols.com
www.lighting.philips.com
www.gilalighting.co.uk