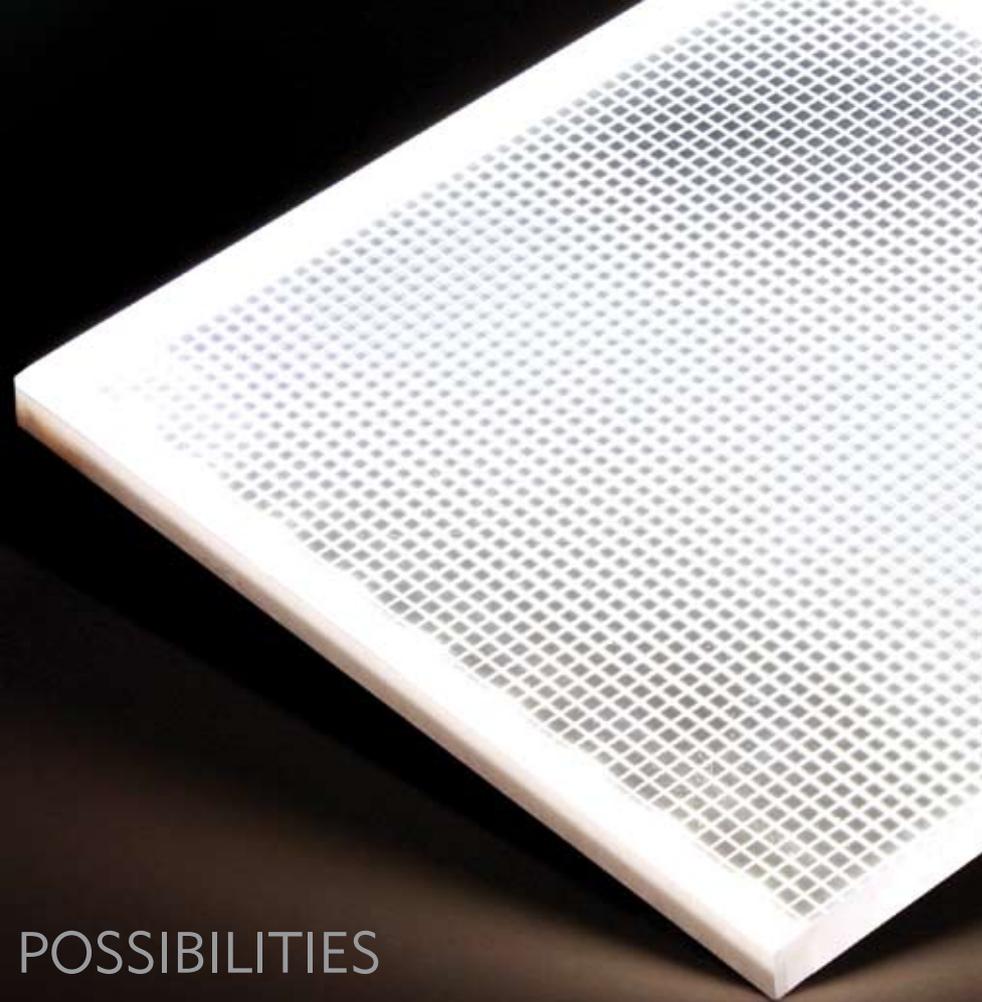




LED LIGHT SHEET

A product from Applelec



LED LIGHT SHEET
ILLUMINATING THE POSSIBILITIES



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The unique construction of LED Light Sheet harnesses a number of patented processes which unite to create an innovative lighting unit which is adaptable to suit each new project. Using patented 3D V-cutting technology, a clear PMMA acrylic is etched with a uniform matrix and cut to a specified shape and size.

A choice of warm and cool white colour temperatures or RGB colour-changing thermally managed LEDs are then securely embedded into the sheet in a second patented technique, which ensures the unit is robustly constructed and runs cool to the touch.

The etched 3D V-cut matrix acts as a vehicle to transport light from the LEDs across the entire surface of the panel to deliver homogeneous illumination.

A standard LED Light Sheet unit features an acrylic thickness of 8mm and a 2.8mm grid, with alternative thicknesses and grid options available to deliver a project specific solution.

LED Light Sheet can be created to suit internal or external installations and fitted with lighting controllers to comply with the aesthetic requirements of each application. Each unit is manufactured in the UK by Applelec.

LED LIGHT SHEET

EVENLY DISTRIBUTED LIGHT

Sourced for its rigidity and light transmission properties, a clear PMMA acrylic is etched using 3D V-cutting technology. This patented engraving technology ensures light is evenly distributed across the surface of the acrylic.

UK manufacture:
provides short lead times

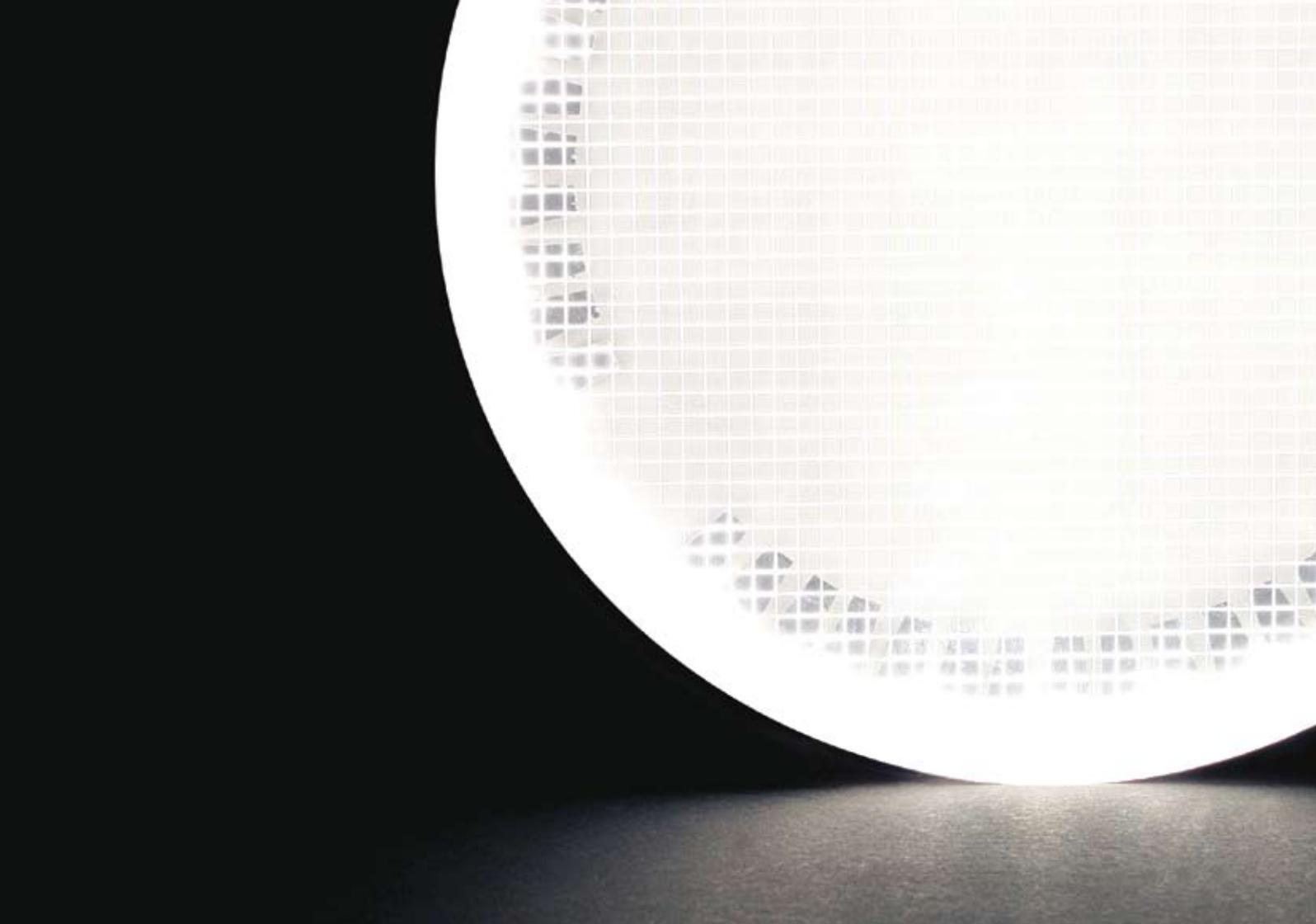
Low maintenance:
components made to last

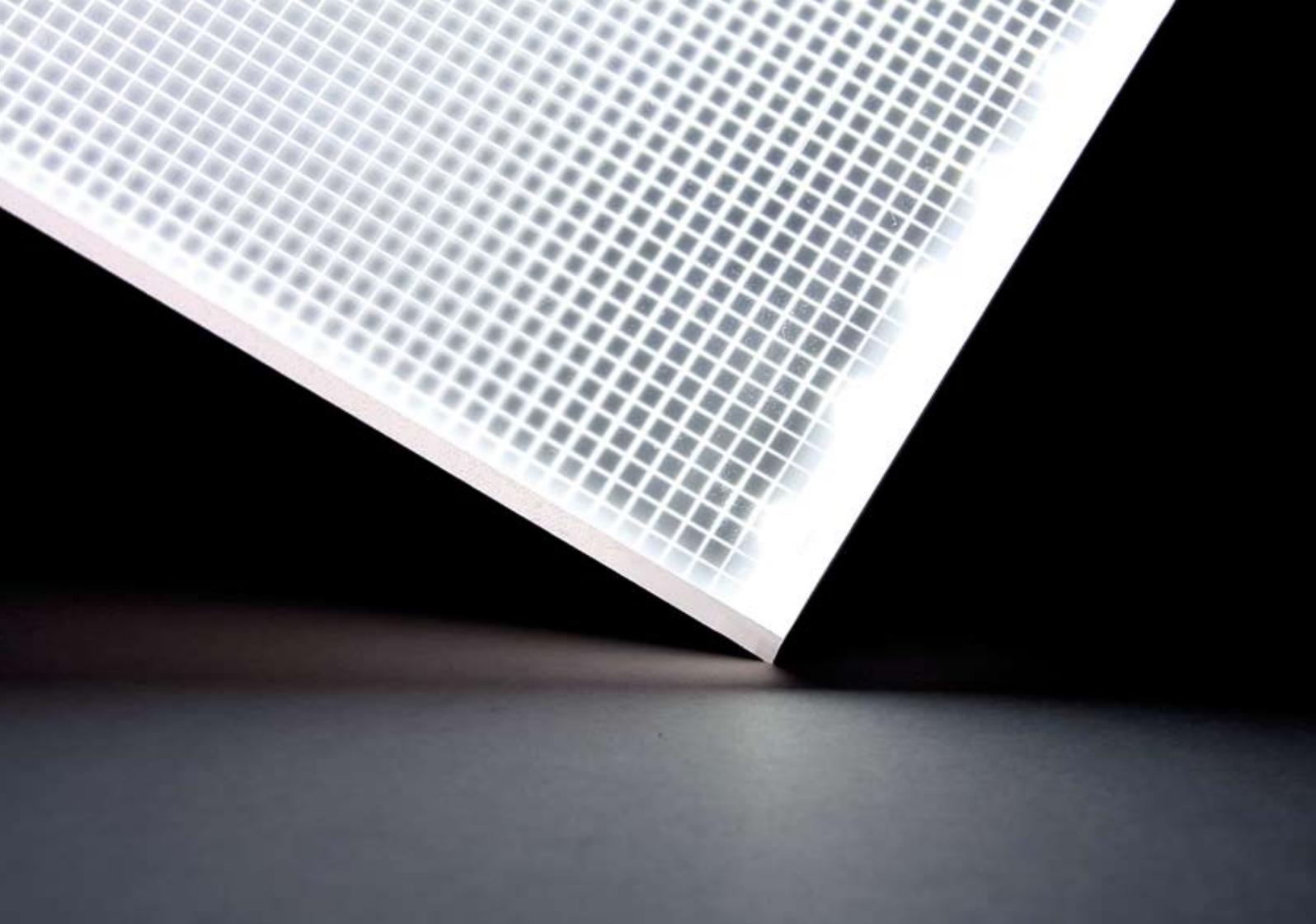
BESPOKE REQUIREMENTS

Cut to specified measurements and manufactured to suit internal or external applications, each unit is embedded with cool white or warm white LEDs in a variety of Kelvin temperatures or RGB colour-changing LEDs. The unit can be manufactured to meet an IP67 rating.

Made to measure: with customised sizes and shapes, and IP67 rating on request

Colour choice: various Kelvin temperatures or RGB colour-changing LEDs





LED LIGHT SHEET

THERMALLY MANAGED LEDS

LED Light Sheet incorporates a unique patented heat sink which dissipates the heat generated by the LEDs. This ensures the unit runs cool to the touch and maximises the longevity of the LED modules.

Bright: high powered thermally managed LED modules

Longevity: lifespan over 50,000 hours

EASE OF INSTALLATION

Supplied with the LEDs securely embedded and all internal connections and wiring complete, LED Light Sheet is delivered ready to install. The power cord is positioned in a chosen location at the side or reverse around the perimeter of the unit.

Ease of wiring: simple plug and play connectors

LEDs installed: robust, user friendly design

HAMMERSMITH APOLLO

In a lighting scheme by James Morse Lighting Design, LED Light Sheet was used to light bar tops in the refurbishment of the Eventim Apollo in Hammersmith, London. With many original Art Deco lighting features restored in the renovation, LED Light Sheet was selected for use in all six front of house bar areas where it illuminates white frosted glass. The panels were created in sections to allow them to be fitted into the shaped bar and create a homogeneously lit surface with each unit created with an IP67 rating to protect against moisture ingress.

Image courtesy of Tom Cronin



ME LONDON

The first hotel to be fully designed by Foster + Partners, with lighting design by ChapmanBDSP, has resulted in a continuity of architecture based on a monochromatic concept of dark and light. Located on the first floor is the main reception and Atrium Bar where a champagne ice tray features a perimeter illuminated with three LED Light Sheet panels. The cool operation of LED Light Sheet, achieved by a unique LED heat sink, ensured it could be successfully integrated within the ice tray whilst flame polished edges at each panel's joining point aided the even distribution of light.

Image courtesy of Foster + Partners



NAYOMI, SAUDI ARABIA

With over 180 stores, Nayomi is the largest lingerie chain in the Middle East and was developed by multi-chain retail group Kamal Osman Jamjoom. For the development of a series of new flagship stores in large city malls across the Middle East, LED Light Sheet was selected to create large pink-lit store entranceways, window displays and illuminated feature bays inside each store. With design by London's Kinnersley Kent Design around a Princess Palace theme that is pretty and romantic, the pink LED Light Sheet entrances deliver a sense of expectation as customers enter the stores.

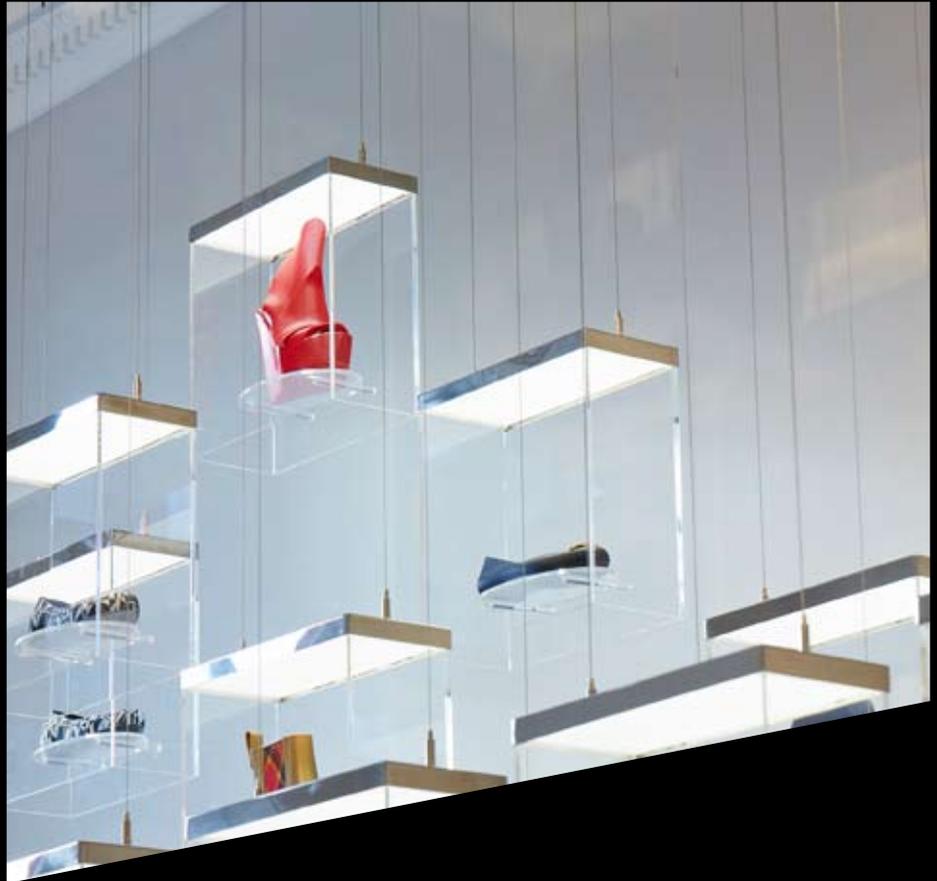
Image courtesy of Nayomi



GALERIA MELISSA

Lighting solution specialists MJ Lighting have created an inventive lighting scheme using LED Light Sheet for the ground breaking Galeria Melissa store in Covent Garden, London. This first Melissa store to open in the UK, features a number of art installations inspired by light, movement and colour. On entering the store, customers are greeted with a kinetic art installation formed of 21 illuminated acrylic shoe boxes. In each box sits one of the iconic plastic shoes lit by LED Light Sheet which is built into the roof of the box.

Image courtesy of Melvyn Vincent



ST LUKE'S HOSPITAL, BRADFORD

A new way-finding system at St. Luke's Hospital in Bradford uses light, colour, shapes and repeated thematic motifs to enhance orientation for people who live with dementia. Considering orientation from a fresh perspective, LED Light Sheet was selected to illuminate artworks at department entrances to highlight visitor routes. Work by a team of designers, including lead artist Stella Corral, plays a fundamental role in creating a welcoming environment where the glowing artworks bring beauty and colour into the corridor spaces. Similarly, LED Light Sheet can be easily integrated within frames to illuminate translucent artworks and photographic prints.

Image courtesy of Sara Porter



LONDON TOWNHOUSE

North Yorkshire based lighting designers Brilliant Lighting illuminated interior and exterior doorframes of a Georgian townhouse and mews with colour-changing LED Light Sheet to create a strikingly modern home. Providing a pop of colour to the street outside and giving a taste of the colourful house to follow, the exterior mews entrance is created in colour-changing LED Light Sheet programmed to run through a series of colour sequences. The external entrance is matched internally by a second colour-changing doorway with both entrances controllable by client operated keypads throughout the home and an iPad app.

Image courtesy of Simon Warren



YORK GLAZIERS TRUST

A Lottery funded project to restore York Minster's East Window has been aided by the creation of illuminated workbenches by J Wedgewood and Sons using LED Light Sheet. Created with 5300K LEDs, the light panels provide consistently even illumination across the surface of two workbenches that were fitted with dimmer controls to enable brightness to be adjusted to each worker's preference and project suitability. Replacing fluorescent tube workbenches, the cool running of LED Light Sheet was highly beneficial to the team as it prevents paint used in the restoration process from drying too quickly which was previously an issue.

Image courtesy of Lois Edwards



TELSCOMBE MANOR

LED Light Sheet was selected by Lighting Force to illuminate a kitchen island surface for the extensive refurbishment of the Grade II listed Telscombe Manor House. The island features a recycled glass bottle surface by Bottle Alley Glass in Arctic White with an IP67 rated LED Light Sheet panel positioned behind the glass to provide even illumination. Using LED Light Sheet for kitchen splash backs and counter tops is one of the simplest and most effective ways to use the product in interior installations where the light enhances the detail and texture of materials such as glass, onyx and marble.

Image courtesy of Lighting Force



A range of accessories is available to compliment the installation and functionality of LED Light Sheet.



SNAP FRAMES

Bespoke snap frames fitted with LED Light Sheet panels create an evenly illuminated light-box with a depth of just 25mm. Constructed from aluminium and supplied with a silver anodized coating as standard, the frames can alternatively be painted to match a project colour scheme. A single snap frame can be manufactured to a maximum size of 1000mm by 3000mm.



CURVED ILLUMINATION

Without compromising the slim profile of the unit, LED Light Sheet can be curved to create an interior design feature or for graphic display. Each curved panel is created to bespoke requirements using a specially constructed drum to heat-form the acrylic into the desired curved shape. Curved light-boxes, suitable for the display of graphics and advertising messages, are created with a frame manufactured in a choice of materials including polished stainless steel.



VARIOMOUNT

Variomount combines illuminated LED Light Sheet panels with sleek aluminium profiles to build modular wall features by mounting single or multiple rows of lit panels. Only three profile types are required to create many different designs. In addition, the system is assembled with no visible fixings to create seamless wall installations. In multi-row installations, the central mounting profile may be fitted with glass shelves to create illuminated shelving systems.



LED LIGHT REEL

The powerful LED strips embedded within LED Light Sheet are available on reels in a variety of colour temperatures. Providing a complimentary solution to any lighting scheme using white LED Light Sheet, the LED reels can be colour temperature matched or used independently. Highly flexible, the LED reels are suitable for perimeter and contour marking and a variety of other purposes. A range of aluminium extrusions and lenses is available to house the LEDs.



LED SABRE LIGHT

LED Light Sheet is complimented by bespoke LED bin matched linear lighting units suitable for internal display, pelmet and coving lighting. The ultra slim profile units are created in extruded aluminium and available in any length up to a maximum of 2000mm. Transparent and translucent lenses feature a choice of three beam angles of 30°, 60° and 90°; alternatively, transparent, white and diffuse covers are available.



TOUCH TECHNOLOGY

Programmed using a capacitive touch sensor, LED Light Sheet is now contact sensitive. The sensor recognises changes of conductivity in the air which enables the charge emitted from the human body to control whether the LED Light Sheet panels are lit or not. This means turning LED Light Sheet on and off is as easy as a touch of the fingertips.



POWER SUPPLY

Each LED Light Sheet unit is delivered with a power supply to suit project requirements. For indoor applications, each standard unit is fitted with a power unit with a three pin plug. For IP67 rated panels, an IP66 driver is supplied for hardwiring. Alternatively, a bare end wire up to a maximum length of 3000mm may be fitted to the unit.



POWER BOXES

When multiple LED Light Sheet panels are used, the power box provides an efficient management system to minimise wiring and reduce contractor time onsite. The range includes 300W power boxes, 240W power boxes for dimmable panels, and 216W power boxes for RGB panels. Spider connectors can further increase the number of LED Light Sheet units powered by one box, depending on the combined load of the panels.



CONNECT

Connect is a small, power-to-luminaire system which delivers a compact and easy to install interconnecting wiring solution. The system can be used for simple or complex wiring solutions and features a range of white wires and component parts that connect and disconnect with ease. Robust yet incredibly slim, the standard 7.5mm male connector can easily fit through an 8mm opening compared to other connectors which require much larger spaces.



CONTROLLERS

The LINEARdrive DC is a highly versatile, enclosed and easy to configure constant voltage driver/controller for indoor LED Light Sheet applications. The unit can be integrated within a network or used as a stand-alone device. To discuss a lighting effect, please contact the LED Light Sheet product specialists with details of project requirements.



DIMMERS

The LED dimmer features a compact design and can be switched on and off without altering preselected dimmer settings. The LED Light Sheet range of dimmers includes units that act as stand-alone devices with a manual lighting control function, or which can be used as a slave unit and interfaced within larger systems. Dimmers can be used with RGB Light Sheet to select colours.



PORTABLE BATTERIES

For LED Light Sheet panels located in areas without easy access to power, a range of portable, rechargeable batteries is a useful option. Fully waterproof and suitable for exterior locations, these 12v lithium polymer batteries are available in a range of sizes including small hand-held units. With a built in fuel gauge, the lightweight batteries are available in 4Ah, 8Ah, 10Ah, 14Ah and 22Ah sizes.

For LED Light Sheet and related accessory specifications, including colour temperature and surface brightness, please download the technical manual from www.ledlightsheet.co.uk

LED Light Sheet qualifies under the government's ECA (Enhanced Capital Allowances) Energy Scheme to help manage climate change. For further details please contact an LED Light Sheet advisor.

Please contact our product specialists to discuss your project requirements

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LED Light Sheet is exhibited yearly at a number of design shows. Full details are available at www.ledlightsheet.co.uk



LED Light Sheet is manufactured in the UK
by Applelec. www.applelec.co.uk