

Lighting Modular

Management & Wiring



Lighting Management is a way of controlling the light we use on a daily basis in everyday situations. ASD Lighting takes pride in offering this range of highly efficient state of the art lighting controls. We offer a variety of systems from integral occupancy sensors to sophisticated dimming systems, for applications such as offices & classrooms, based on amounts of natural daylight & occupancy.

This unique range is adaptable to its surrounding environment & highly energy efficient.



e-motion CORRIDOR

Products with Emotion Corridor Function

- Harmony
22w, 26w, 38w, 40w, 55w
& LED
- Harmony Halo
22w, 26w, 38w, 40w
& LED
- Profile Anti-Ligature
22w, 26w, 38w, 40w, 55w
& LED
- Litepod
All wattages
- Square One
38w & LED
- Rhapsody 600 & Rhapsody
Reflector II (slave only)
14w, 24w, 40w, 55w
- Concerto Zip Downlight
(slave only)
18w, 26w, 32w, 42w
- Centro Circo Large
22w, 26w, 38w, 40w
- Highlite
54w, 80w
- Maxi Pizza
38w & LED
- Storm (slave only)
All wattages

ASD has a wide range of dimmable luminaires that are suitable for use with ASDs' e-MOTION systems.

This system can control a range of lamp types including 2D, compact fluorescent and T5 circular and now LED, a system unique in the LED marketplace to ASD lighting.

Ideal for stairwells and corridors where lighting is required to be turned on 24/7 but may only be actively used for a small proportion of that time. For example, hotels etc. On emergency or secondary stairwells or healthcare corridors where luminaires are required to be turned on but in reality these areas are rarely used.

e-MOTION Corridor – What is it?

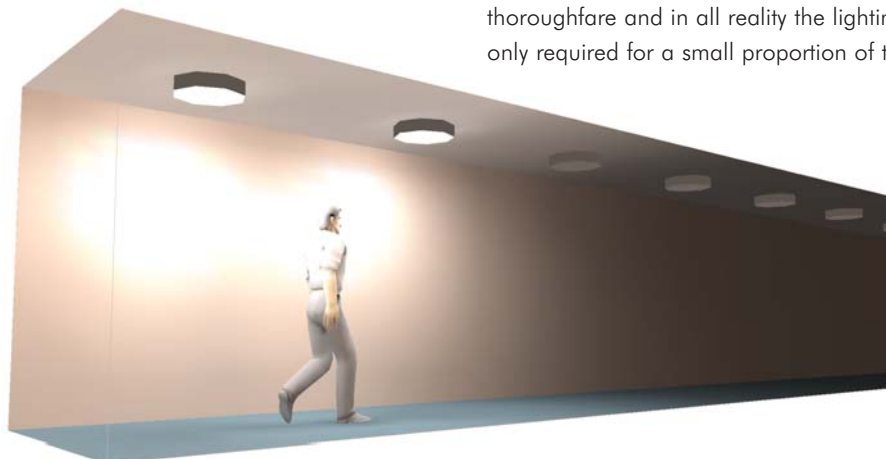
The 'e-MOTION Corridor' system is a simple lighting control system that can perform in small or large premises and has the benefit of complex functionality if required, whilst remaining very simple to install and maintain.

The 'e-MOTION Corridor' system is energy efficient and economical and can give savings of up to 70% energy use in 24 hour applications.

The system works by using specialist DALI control gear which can be programmed to meet the customers specific requirements.

The ASD Lighting 'e-MOTION Corridor' system uses integral Microwave sensors which detect movement. These are fully concealed so that unlike much of the competition, the fittings look completely normal on the outside and do not have any protruding sensors.

The system is modern, highly effective technological approach to conserving energy for situations where the area is used as a thoroughfare and in all reality the lighting is only required for a small proportion of time.



Corridor starts at its pre-set dimming % (eg 10%). Once the sensor picks up movement the fittings instantly come up to full brightness.



As you move along the corridor and the activation time elapses on the first fittings they dim back down to their pre-set dimming % (eg 10%).



Lighting control systems and lighting management systems have established themselves as permanent features of modern lighting solutions and provide the basis for daylight-dependent lighting.

Most commonly used to dim the row of luminaires closest to the windows in open spaces to create a defined constant light value along the window row, or possibly further into an open space if daylight penetration comes from skylights / roof windows.

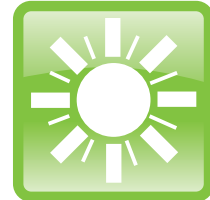
The system uses digital DSI Ballasts and a light sensor. If the available daylight level falls, the luminaires are automatically turned on at a pre-set value.

- **Intelligent system with some programmability which remains simple to install.**
- **Savings of up to 30% can be made in energy use.**
- **Presence / absence detectors can be incorporated into the system to take full advantage of any further energy savings to be made.**

The basic components needed are a DSI room sensor and dimmable control gear for the various light sources. With such an array of products any lighting task can be covered.

Tailored to individual requirements, the intelligent lighting control systems and lighting management systems from ASD are based on the versatility of the digital interface and the self-detection capacity of the control signal.

Tried and trusted DSI technology (Digital Serial Interface) and the DALI interface protocol (Digital Addressable Lighting Interface), offer application-specific flexibility for both small and extensive lighting systems. The modular DIM system is designed primarily for controlling groups of luminaires in large enclosed spaces.



e-motion DAYLIGHT provides an easy-to-use cost-effective constant lighting system. The sensors detect the available ambient light and use this as the basis for controlling the lighting system to achieve a defined constant light value. This set-point (fade value) can be temporarily adjusted and the system switched on or off via DSI signals.

DSI is the traditional digital control. The intelligent functions of DSI lighting management include programmability, the option of common routing of the control line and mains power supply, and interference free communication.






A simple to install and cost effective system for switching and dimming of up to 25 ballasts (Digital H.F regulating). A system normally associated with single rooms. By the use of a push to make switch, a single press will turn the luminaires on or off. Pressing and holding the switch will dim or brighten the lamps.

The e-motion ONE-TOUCH provides a simple but ingenious way of switching and dimming fluorescent fittings from ASD, all with a simple conventional mains voltage switch. In a direct comparison with other cost-effective control methods, it not only has a distinct cost advantage (a switch is cheaper for example than a 1...10 V potentiometer) it also offers numerous intelligent functions:

- **Silent operation.**
- **A wide range of ASD luminaires are suitable for this system.**
- **Simple, cost-effective and extremely user-friendly.**
- **Powerless switching via the control interface.**
- **Two way or multi-position switching is possible.**

Multi-functional switch

Different functions are performed depending on the current operating status and how long the switch is pressed. A short press on the switch switches the connected ballasts on or off depending on their current status. Holding down the switch will fade the connected ballasts up or down, with the direction of fade changing each time the switch is pressed.

The system can be synchronised after setup by holding down the switch for more than 10 seconds. Synchronisation causes the lighting level to jump to 50%.

Simplicity itself

As in the case of changing from DSI to DALI control, there is no need to rewire the luminaire when changing to e-motion ONE-TOUCH control. All you have to do is integrate a bridge on the luminaire terminal from the neutral conductor to an interface input (D1/D2) and connect the phase to the other interface input.

Technical Specification:

- **Any number of conventional switches.**
- **The control signal corresponds to the mains voltage.**
- **Fade rate 2.55 sec. (1 % to 100 %)**
- **Unlimited length of the control line**
- **Control of a theoretically unlimited number of ballasts (recommended: 25 ballasts per system).**
- **Dimming possible via a second phase.**





The interior range from ASD now offers the option of including the latest state-of-the-art sensor technology. High-frequency sensors can be invisibly concealed inside a number of our attractive luminaires. The sensor instantly responds to the tiniest movement, regardless of temperature and will automatically switch "ON" the light.

Integral HF "Microwave" Sensor

The system uses remote or integral microwave detectors which upon sensing movement switches all luminaires on the system up to full output.

When no movement is detected, after a pre-set time the system turns off after activation time elapses.

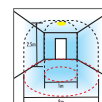
- Fully adjustable settings to suit any installation.
- Takes full advantage of energy savings. Can be up to 70% on a 24 hour application.
- A wide range of ASD luminaires are suitable for use with e-motion MICROWAVE sensor.

ASD HF Microwave sensors are designed specifically for indoor spaces, such as stairwells, corridors or bathrooms. The innovative lights can be either wall or ceiling mounted. HF Sensor Lights ensure efficient, money-saving light management as well as added convenience and safety in the home, commercial premises, administration centres and other buildings.

The intelligent fitting is just as easy and quick to install as conventional luminaires – and there's no need for separate switches or motion detectors.

Benefits at a glance:

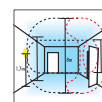
- Safety, convenience and energy saving because light comes "ON" automatically.
- Extremely rapid response time.
- Reliable, all-round detection regardless of ambient temperature and direction of movement.
- Reach, light threshold and "ON" time adjustable to suit needs.
- Rapid installation: Sensor and light = 1 connection.



Detection zones for ceiling mounting.



Response threshold can be set from 2 to 2000 lux to suit individual needs.



Detection zones for wall mounting.



Light can be set to stay "ON" for any time between 5 sec. and 15 min.

Voltage		230 – 240V 50 Hz
HF System	5.8 GHz (responds to the tiniest movement regardless of temperature)	
Angle of coverage	360° with 160° angle of aperture	
Transmitter power	Approx 1mW	
Reach	1 – 8m infinitely variable	
Max. area covered	Approximately 50 m ²	
Time setting	5 sec – 15 min	
Twilight setting	2 – 2000 Lux	
Permanent light	–	
Brightness control	–	
Special features	Other loads can be connected (100 VA max, e.g. bathroom / WC extractor fan or additional light)	



The logo for e-motion SCENE features the same stylized green 'e' as the main logo, followed by 'emotion' in a bold, lowercase sans-serif font, and 'SCENE' in a smaller, uppercase sans-serif font below it.

Infra-red scene setting system provides 3 program scenes suitable for a variety of applications such as conference rooms, meeting rooms, lecture theatres, or any space where a selection of lighting scenes may be required.

Requires the use of dimmable ballasts, an infra-red receiver and a hand held controller to create three separate lighting scenes, with an over ride facility.

The control module is connected using a two wire bus system taken to each luminaire. The infra-red receiver is then connected to the control module.

Using the hand held programmer, all the required lighting scenes can be set up simply and quickly.

Hard wired switches can be incorporated into the system at any position.

The result is a professional solution that is easy to handle, simple to install and extremely cost-effective.

A wide range of ASD luminaires are suitable for use with e-motion SCENE.





The intelligence of individually addressable EmPRO emergency lighting unit is now available for small emergency lighting systems. This is thanks to the new e-PANNEL, which has been developed with user-friendliness as an absolute priority.

Systems are available to connect up to 60 or 120 emergency lighting units. Three addresses are reserved for relay modules so that different operating conditions can be indicated by signal lamps.

The e-PANNEL is synonymous with simple configuration, with high-quality monitoring and automatic triggering of all the emergency lighting tests prescribed in the relevant standards. These include the check on the operability of modules, batteries and lamps, the annual service life test and the commissioning check after installation in accordance with the self-test standard as per IEC 62034.

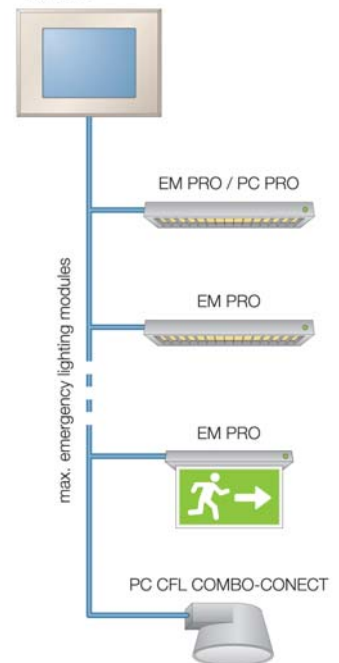
An algorithm automatically assigns all the addresses to six test groups so that the prescribed tests on the emergency lighting units start at staggered times. This ensures that there are always enough luminaires operational at any one time should there be a mains failure. A perfect example of intelligent functionality.

Fault messages are shown on the e-PANNEL display, stored in memory and maintained as a log book. The data can be read out via an infra-red link and further processed (archived for example), burnt onto CD or printed out.

e-PANNEL



PANNEL



Snap In Connectors & Modular Wiring Systems

Fast, reliable and already tried and tested millions of times, the future of electrical connection clearly belongs to the snap-in connector. Modular wiring systems have the right solution to satisfy any practical requirement in contemporary building applications.

In the modern age where time is money, modular wiring systems are becoming more and more essential to keep installation costs down, this allows all parties to maximise their efficiency.

From Warehouses to Office Blocks, Football Grounds to Schools, modular wiring systems are being used more and more often and with more innovative fittings utilising inbuilt connectors it has never been easier to use.

ASD Lighting works very closely with all major suppliers of modular wiring and connectors meaning we can supply and specify any make and model as per the clients requirements, these include;

Wago

Wieland

Metway

Below is a brief description of the components available;

Male and female connectors

In 2, 3, 4, and 5 pole with 2 conductor entries per pole and time and cost saving Cage Clamp S connection which allows looping through of wiring. The connectors have unique coding and colours and are pre-marked.

Snap in connectors

Snap in connectors (2, 3, 4, and 5 pole) with integrated locking device make feedthrough connection easy. Direct earth connection to a metal enclosure is available as an option. More lighting manufacturers are fitting these as standard.

T-pieces

In 2, 3, 4, and 5 pole, these make the connection of lighting fixtures easy, without using a junction box. The through wiring is simply plugged in each side.

Distribution connector

This can act as a star distribution point, in a ceiling installation for example, with leads connecting each side. Mounting options are available.

Distribution connector with phase selector

The extra feature allows equalisation of phase loading in a lighting circuit for example. Simple movement of the white lever selects the chosen phase.

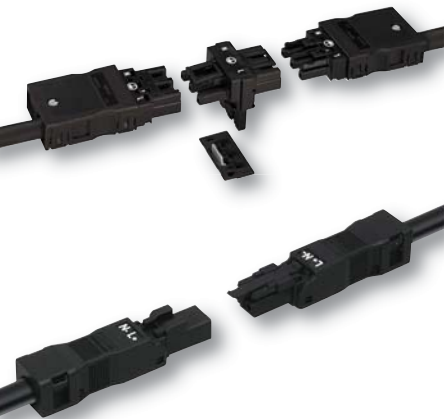
Six pole strain relief

This allows simultaneous use of two 3 pole connectors to make a 6 pole connector, essential in lighting control applications.

Clean earth

For use in clean earth and high integrity earth applications only, their different coding and colour ensure mismatching is not possible. Available in 4 and 5 pole, with either 2 or 3 earth connections and with 2 current carrying poles.

For more information or a Modular wiring design using ASD Lighting products please contact the lighting specification team. specifications@asdlighting.com



Case Study

Chesterfield FC – New Stadium



ASD Lighting supplied the lighting for new Chesterfield Football Club ground which was completed before the start of the 2010 / 2011 season. One of the requirements for this installation was modular wiring on all the recessed luminaires used throughout the stadium, many of these luminaires were in corporate areas where lighting controls and dimming systems were to be used meaning a 6 pole modular wiring system was required. For this project we worked in partnership with **WAGO** to come up with a tailor made solution.

Flying leads with a T-Piece connector were supplied on the ASD Lighting luminaires meaning all the installer needed to do onsite was put the luminaires in to position and then connect up all the luminaires using the specified Male-Female connector leads. SIMPLE!