





Fulham's Lighting Controls (LCS) Manage 7 Integrated Lighting Control Strategies

1. DAYLIGHTING

Daylighting employs sensors and lighting control systems to adjust lighting levels according to the availability of natural light during the course of the day. Potential Energy Savings: 35-45% in daylit areas.



2. TASK TUNING

Task Tuning allows lighting designers to control lighting according to task and working environments. The ability to implement this kind of work and task lighting control strategy can save considerable energy when implementing industry recognized IES recommended lighting levels or those levels specified by the lighting consultant or engineer. Potential Energy Savings: 15-25%.



3. SCHEDULING

Using advanced scheduling, the system can provide the appropriate lighting configuration for different parts of buildings during the work day, work week and through different seasons. Potential Energy Savings: 15-25%.





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4. LUMEN MAINTENANCE

Lumen depreciation is the loss of light output as a light source ages. Lumen Maintenance Controls solve this problem through reducing power in response to higher initial lamp lumens while increasing power as lamps age to maintain appropriate light levels. Designers are no longer forced to over-design lighting to compensate for lumen depreciation. Potential Energy Savings: 7-10%.

5. OCCUPANCY SENSING

Lights are dimmed to the off state when the system detects that there are no longer occupants in a particular room or area. As building occupants move from location to location, the system dynamically responds to user-traffic patterns, providing the right level of light where it is needed and shutting off areas which are vacant. Potential Energy Savings: 15-25%.

6. PERSONAL CONTROL

Through individual software clients, web-based interfaces or IR remote controllers, the personal control capabilities of Fulham's solution allow individuals to personalize the amount of dimming they prefer in their offices or work areas within globally-set system limits. Potential Energy Savings: Variable.

7. LOAD SHEDDING / DEMAND RESPONSE

Load Shedding, sometimes termed Demand Side Management or Demand Response, allows lighting to be either adjusted on a fixed schedule in response to building demands or dynamically in response to emergency signals or real-time pricing signals to monitor, shed and report (sub meter) on the actual reductions implemented and their effects on building systems and consumption. Potential Energy Savings: Energy Rebates.





Using only four components and no commissioning at all, you can easily create a highly functional solution that includes multi-scene control stations, occupancy sensing and high performance dimming ballasts & drivers.

ROOM SOLUTIONS



Plug in a controller and use Room Software to combine control of multiple rooms located in different areas, adding value via scheduling, daylighting and more.

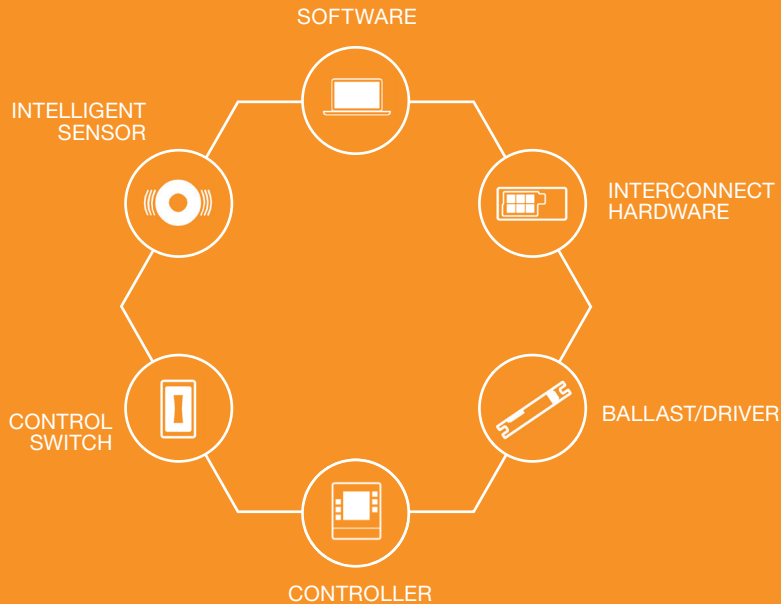
AREA / FLOOR SOLUTIONS



Network additional controllers together and use Enterprise Software to allow building-wide control and monitoring of energy use. Implement savings by integrating with other building systems and providing utility demand/response functionality.

BUILDING SOLUTIONS

6 Elements Are All You Need.



SYSTEM FEATURES:

- *Easy Install – no fixture or lamp changes*
- *Digital two-way communication at each fixture*
- *Intelligent system status monitoring*
- *Seamlessly scalable in diverse applications*
- *Personal dimming and scene control*



Control Switch

- Four fully customized scenes
- Scene indicator LEDs show the current scene
- Slider allows dimming within each scene
- Occupancy enable/disable function



Intelligent Sensor

- Automatic occupancy sensing functionality
- Built-in Daylighting sensor used with Controller
- Available in short and long range configurations
 - Short range ideal for cubicles, conference rooms, etc.
 - Long range ideal for hallways, common areas, etc.
- User adjustable timeout period (Room Software)





Fulham® LED Drivers

Fulham also offers highly efficient DALI digital addressable drivers for full range dimming and control.



Quick Connect Boxes

Quick Connect Box

- Provides interconnection without power

Quick Connect Power Box

- Allows a connected Lighting Controls Intelligent Ballast to supply power to the Room Solution
- One Required for each standard Room Solution
- With the exception of power supply functionality, operates the same as the Quick Connect Box



DAI to 0-10V Adapter

- Enables digital control of analog devices & systems
- Adds individual addressing capabilities to analog systems
- Controls up to 25 fixtures as a single lighting zone
- No external power supply
- Enables digital control of 0-10V





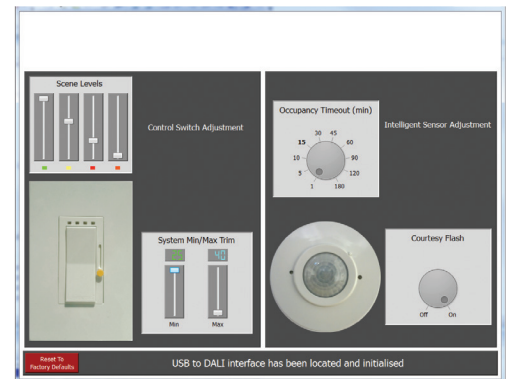
DALI to USB Adapter

- Connects Room Software to the Room Solution system
- Enables real-time system updating
- Programs system settings



Room Software

- Optional software for Room Solution configuration
- Enables users to adjust system behavior over time of
 - Scene light level
 - System min/max trim
 - Occupancy timeout period
 - Courtesy flash status



Controller (Area and Building Solutions only)

- Reduce lighting energy 50-70% with advanced control strategies
- Manages up to 256 digitally addressed devices per Controller
- Manages 25,000 sq. ft each, network Controllers together up to 3.2 Million sq. ft
- Can be mounted in the electrical room or in the area to be controlled.
- BACnet integration into building management systems
- Additional USB and Ethernet ports for future expansion
- Firmware remotely upgradeable for enhancing system





About Fulham

Fulham Co., Inc. is a leading global supplier of electronic ballasts, lamps, electronic transformers, LED modules & drivers, emergency lighting systems, induction systems, wiring harnesses, custom assemblies and more. Fulham has facilities dedicated to sales and service excellence in North America, Latin America, Europe, Asia, Africa, India, and the Middle East. Fulham's product diversity and excellence is due in part to its international staff of world-class engineers and production experts, as well as its commitment to product innovation. Fulham's product quality ranks among the highest in the industry. Fulham is dedicated to being the leader in cost-effective and energy-efficient lighting solutions. For more information about Fulham Co., Inc., please visit www.fulham.com, or contact our U.S. Customer Service team at (323) 599-5000.



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