Lighting Solutions

iLight Solo Solutions Guide

With the LCC-10 Lighting Connection Centre

iLight Solo Solutions Guide

iLight Solo is a cost effective control solution for simple stand alone DALI applications where fast installation and minimal commissioning is required.

At the heart of the Solo system is the LCC-10 Lighting Connection Centre, which is complimented by a range of sensors, connecting leads and plugs for a complete solution.

LCC10 can also be used alongside iLight SCMD2 and SCMD4 fully addressable DALI controllers providing a fast, ‘plug & play’ method of deploying luminaires, sensors and control plates within a building-wide lighting control network.

Each application within this document includes an equipment list, making the products easy to specify and order.

Contents

Further Resources

View our full range of Solo Sensors here:

View our full range of Wiring Accessories here:

Sensing technology

PIR (Passive Infrared)

What is a PIR movement sensor?
A Passive InfraRed sensor (PIR), is a device capable of measuring infrared light radiated from objects within its line of sight.

How does it work?
A pyroelectric sensor (pyro) is the component that does the 'work' of sensing movement. Humans emit heat energy in the form of infrared radiation. A PIR movement sensor uses a pair, or two pairs, of pyro's to detect the difference in heat energy between a person and the surrounding environment.

PIR sensors use a multi faceted (Fresnel) lens to help focus the infrared signals onto the pyroelectric sensor.

What are the benefits?
- Detects movement accurately irrespective of ambient light level
- Consumes very little power
- Cost effective solution with varying ranges of coverage

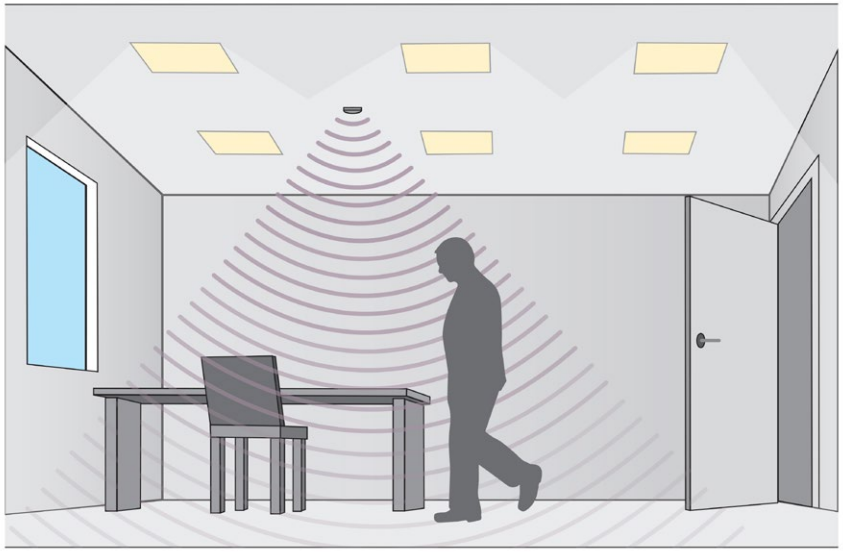
PIR sensors detect the difference in heat energy between a person and the surrounding environment. They are better suited to smaller spaces or where a defined detection pattern is required.

Microwave

What is a Microwave movement sensor?
A Microwave sensor emits electromagnetic waves, it also contains a 'receiver' that can detect when the waves are reflected back.

How does it work?
A microwave movement sensor emits waves which are then reflected back to a receiver. If there is movement in the space, the emitted waves are altered. These changes are registered at the reciever.

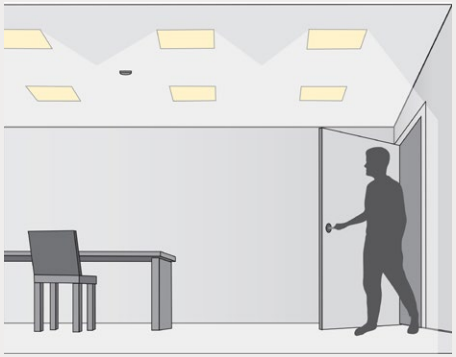
What are the benefits?
- Highly sensitive with greater accuracy of detection
- Suitable for warm or hot environments where a PIR may not provide reliable detection
- Wider coverage than the equivalent PIR detector
- Can detect through glass plastic and thin walls



Microwave Detectors are sensitive to objects that move, with much greater coverage and sensitivity than PIR. They can detect through glass, therefore careful consideration of installtion location is needed in certain applications.

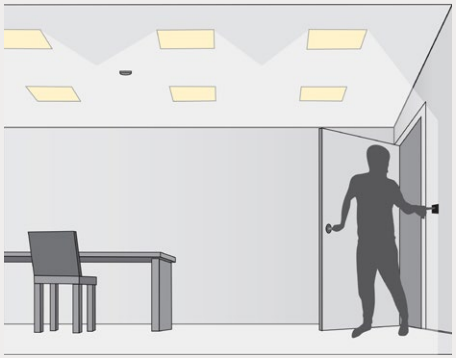
Detection to suit the application

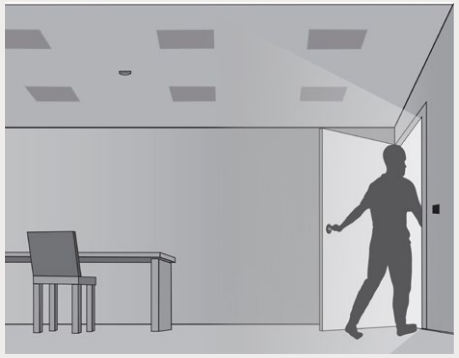
Presence detection



The sensor will switch on lighting automatically when a person enters the room, and switches off lighting automatically when no movement is detected.

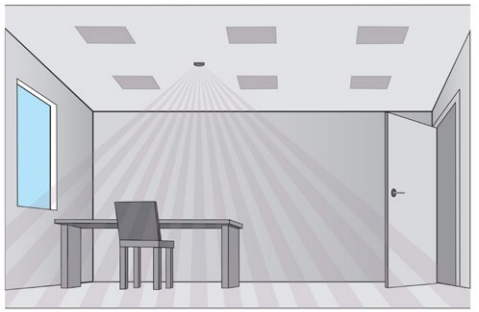
Absence detection



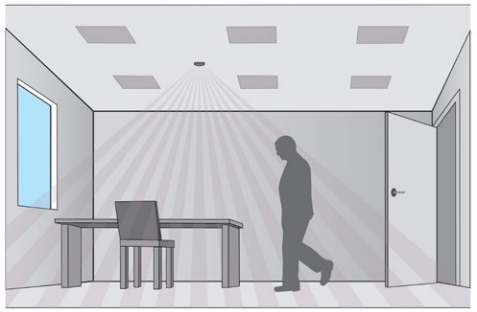


When entering the room a person manually switches on the lights. Once the person has left, the sensor switches off the lighting automatically when no movement is detected. Lights can also be switched off manually at any time.

Daylight Harvesting

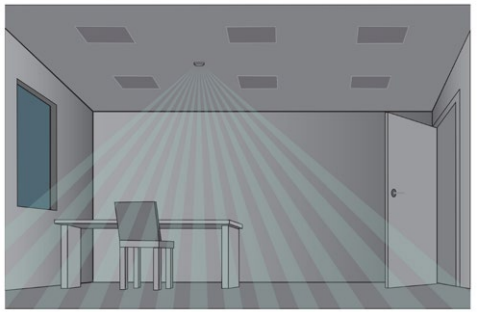


No presence detected, daylight, lights off.



Presence detected, sufficient daylight, lights off.

Presence detected, insufficient daylight, lights on.



No presence detected, lights off.

- All presence detectors have an adjustable lux sensor which will keep the lighting switched off if there is sufficient natural daylight.
- All ceiling mounted detectors can be configured with a simple programming handset.
- A time delay can be set to avoid nuisance switching when the natural daylight in the space is constantly changing.
- Daylight harvesting can be applied with both absence and presence detection.

DALI Dimming - Application 1

DALI, presence detection with adjustable on/off levels

An occupancy sensor is programmed to switch the lighting on at full brightness when presence is detected and the space occupied. When the space is unoccupied, the lighting level will dim down, the level can be configured to suit and set with the hand-held programmer.

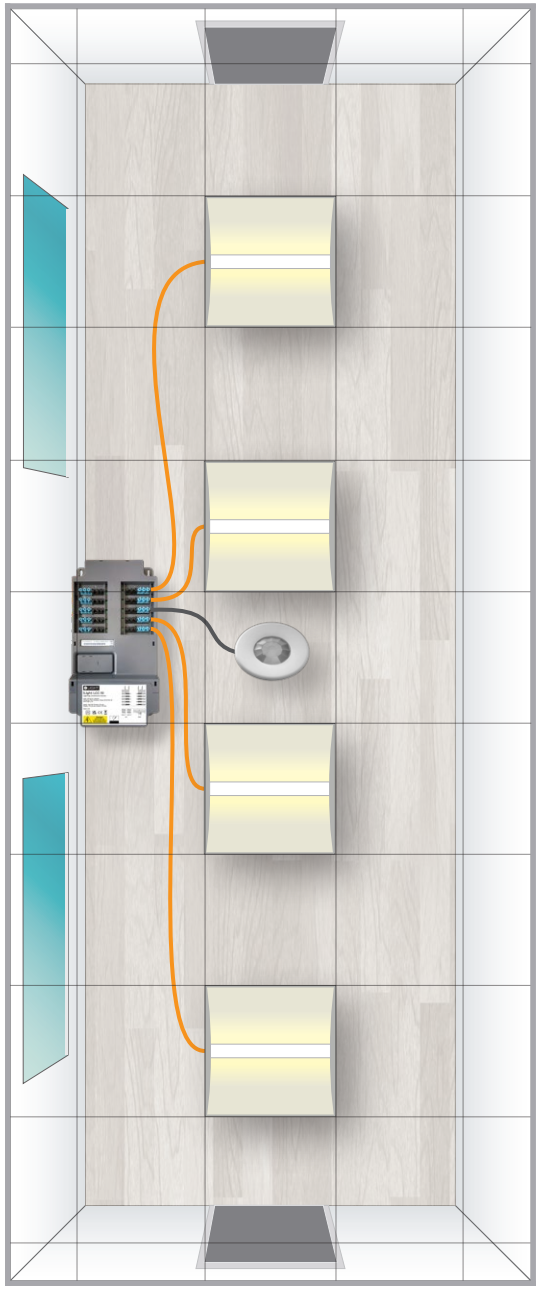
This is ideal for areas where the lights never need switch off and a safe environment with some level of luminance is required.

- Hotel corridors
- Care home corridors
- Nurse Stations
- General circulation spaces
- High security areas

Hotels

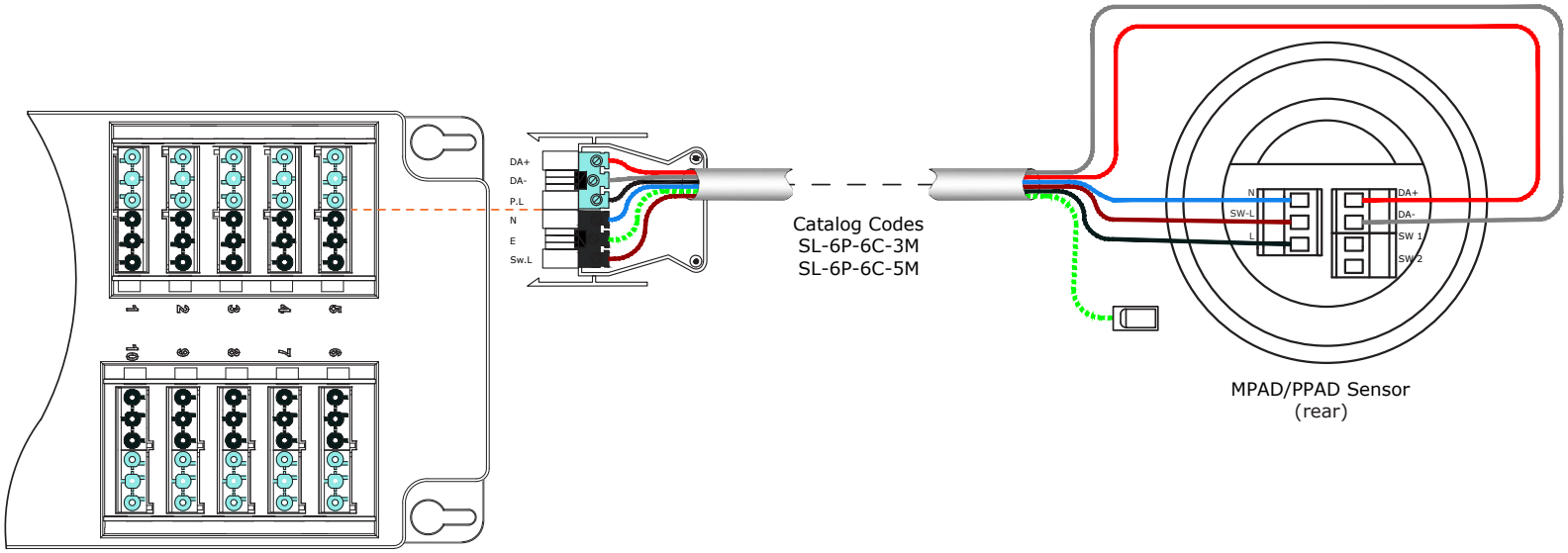
Care Homes

Healthcare

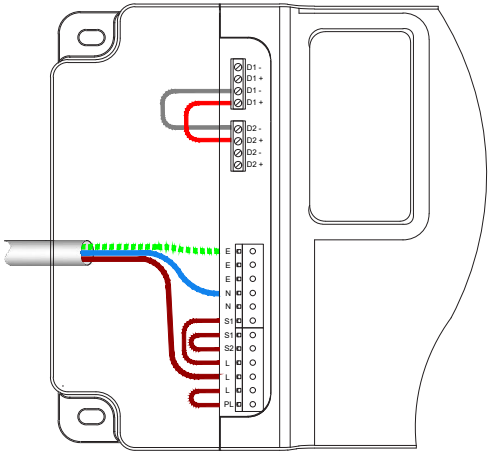


DALI Dimming - Application 1

Connection Wiring Diagram



Output 1-10 - Dimmed



iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
PPAD-C-DALI-230V	PIR - Presence/Absence DALI Dim & 230V Switching
MPAD-C-A-DALI-230V	Microwave - Presence/Absence DALI Dim & 230V Switching - Adjustable
LUPX-6P-5C-3M	6-pole Luminaire Lead - 5-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-5C-5M	6-pole Luminaire Lead - 5-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-6C-3M	6-pole Luminaire Lead - 6-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-6C-5M	6-pole Luminaire Lead - 6-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
SL-6P-5C-3M	Sensor Lead - 5-core 3 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
SL-6P-5C-5M	Sensor Lead - 5-core 5 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
HHIR-LCD-PROG	Infrared Programming Handset with LCD display
HHIR-PROG	Infrared Programming Handset

DALI Dimming - Application 2

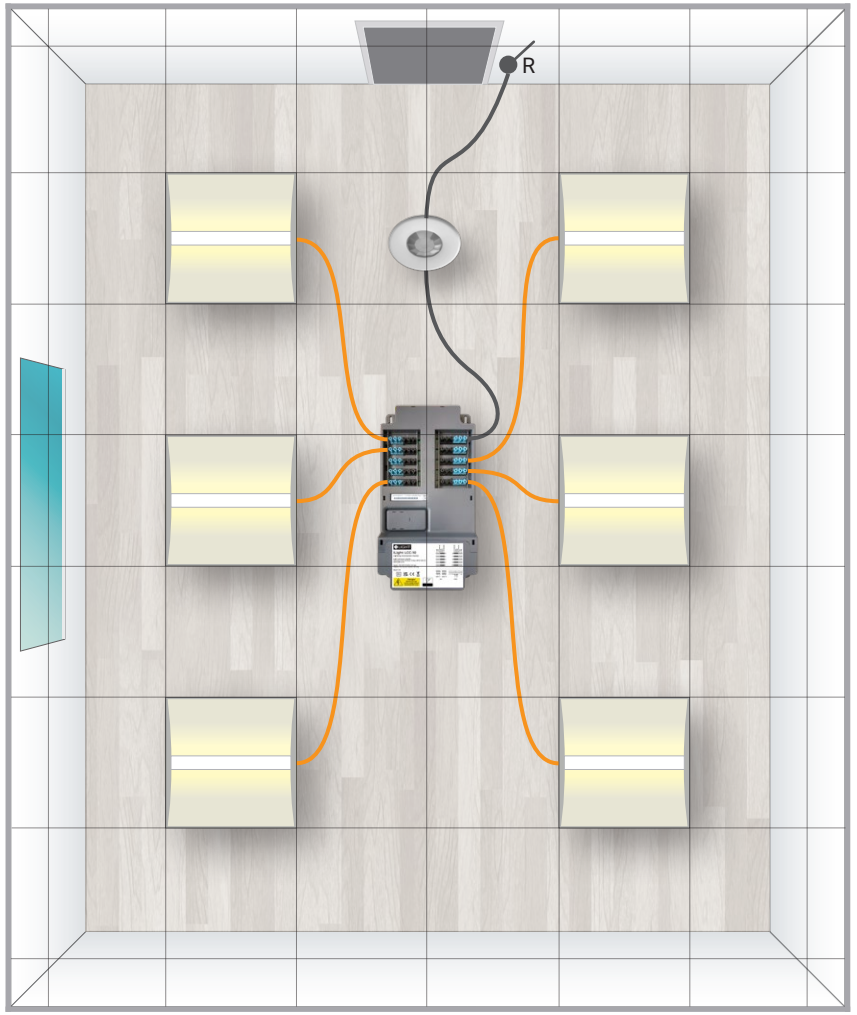
DALI, absence detection and maintained illuminance

A dual position retractive switch provides manual dimming and enables the user to control their lighting levels.

An occupancy sensor is programmed to provide absence detection ensuring the lights switch off when the room is unoccupied.

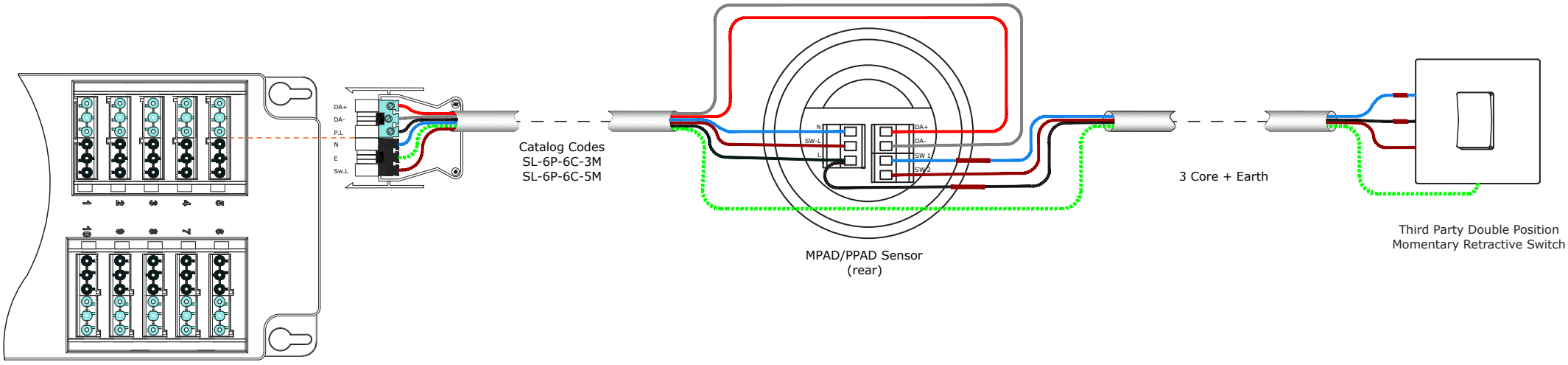
- Meeting rooms
- Cellular offices
- Small receptions
- Patient rooms
- Doctors surgeries
- Laboratories

Offices Healthcare Veterinary Education Research

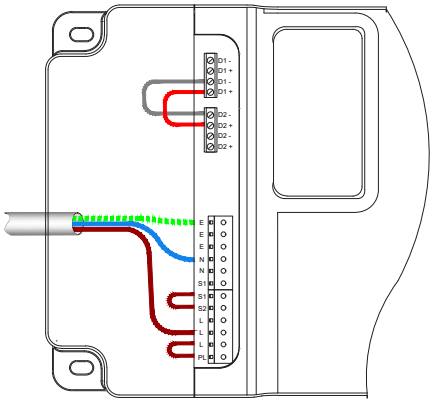


DALI Dimming - Application 2

Connection Wiring Diagram



Output 1-10 - Switched/Dimmed



Pluggable Sensor
arrangement

iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
PPAD-C-DALI-230V	PIR - Presence/Absence DALI Dim & 230V Switching
MPAD-C-A-DALI-230V	Microwave - Presence/Absence DALI Dim & 230V Switching - Adjustable
LUPX-6P-5C-3M	6-pole Luminaire Lead - 5-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-5C-5M	6-pole Luminaire Lead - 5-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-6C-3M	6-pole Luminaire Lead - 6-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-6C-5M	6-pole Luminaire Lead - 6-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
SL-6P-5C-3M	Sensor Lead - 5-core 3 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
SL-6P-5C-5M	Sensor Lead - 5-core 5 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
HHIR-LCD-PROG	Infrared Programming Handset with LCD display
HHIR-PROG	Infrared Programming Handset

DALI Dimming - Application 3

DALI and absence detection across two rooms

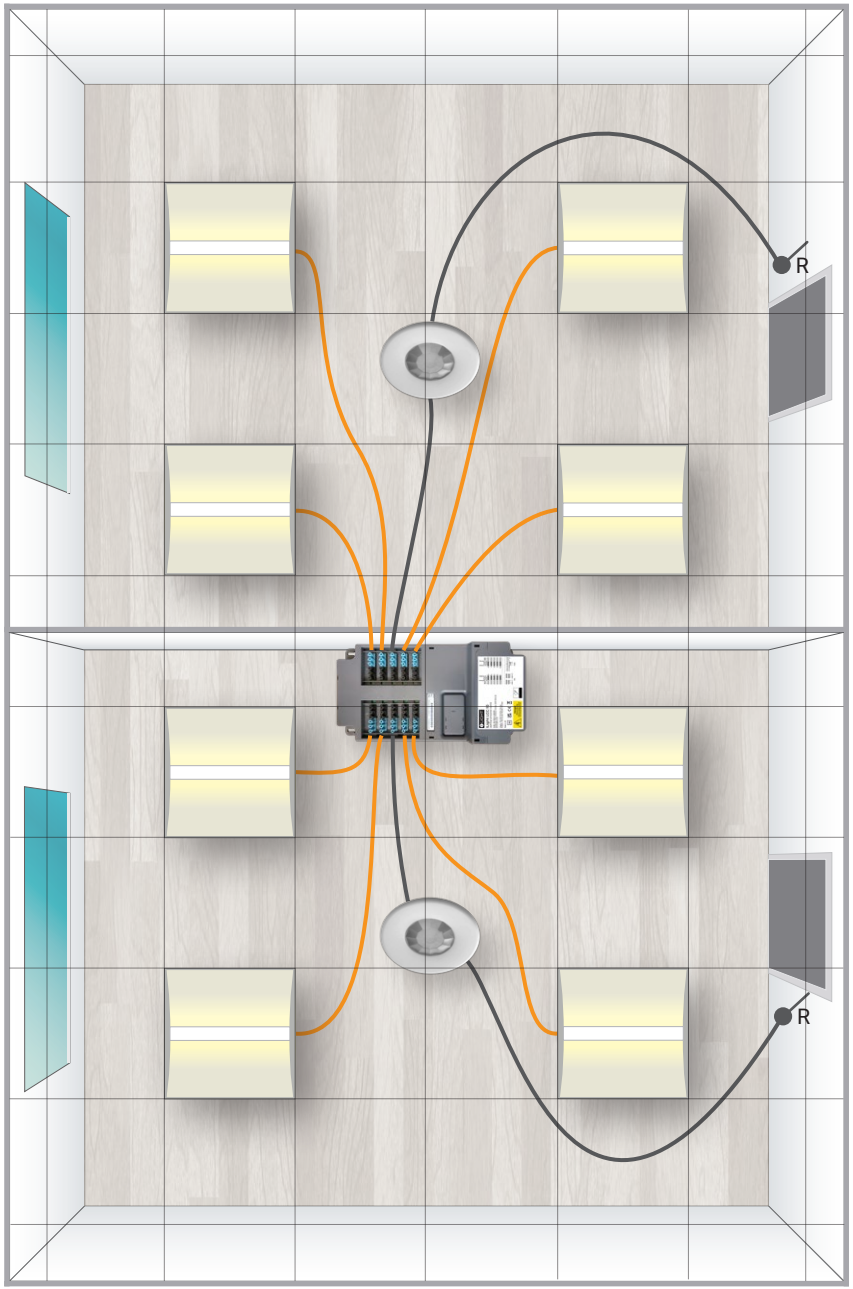
Dual position retractive switches provides manual dimming and enable the user to control their lighting levels.

An occupancy sensor in each space is programmed to provide absence detection ensuring the lights switch off when the room is unoccupied.

The LCC-10 supports two channels of control and the independent dimming and switching of two groups of five outputs.

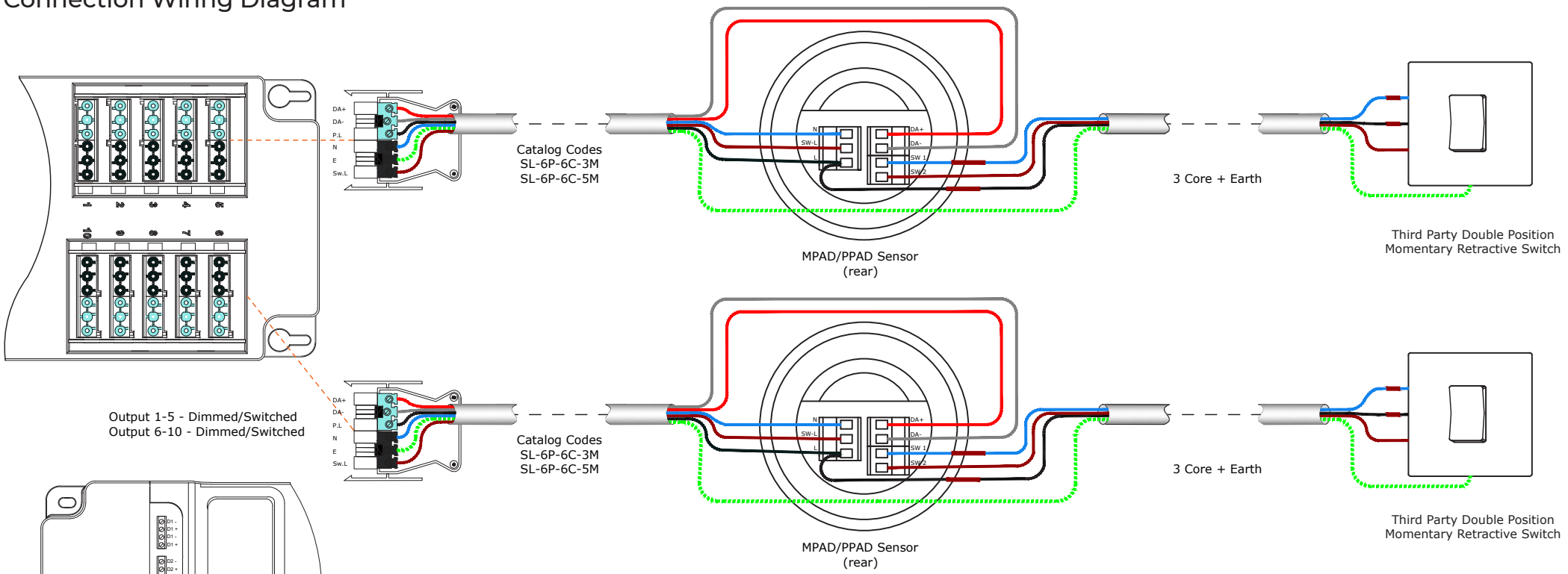
- Meeting rooms
- Cellular offices
- Small receptions
- Patient rooms
- Doctors surgeries
- Laboratories

Offices Healthcare Veterinary Education Research



DALI Dimming - Application 3

Connection Wiring Diagram



iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
PPAD-C-DALI-230V	PIR - Presence/Absence DALI Dim & 230V Switching
MPAD-C-A-DALI-230V	Microwave - Presence/Absence DALI Dim & 230V Switching - Adjustable
LUPX-6P-5C-3M	6-pole Luminaire Lead - 5-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-5C-5M	6-pole Luminaire Lead - 5-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-6C-3M	6-pole Luminaire Lead - 6-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-6C-5M	6-pole Luminaire Lead - 6-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
SL-6P-5C-3M	Sensor Lead - 5-core 3 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
SL-6P-5C-5M	Sensor Lead - 5-core 5 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
HHIR-LCD-PROG	Infrared Programming Handset with LCD display
HHIR-PROG	Infrared Programming Handset

DALI Dimming - Application 4

DALI, presence detection with 2 stage dimming & off

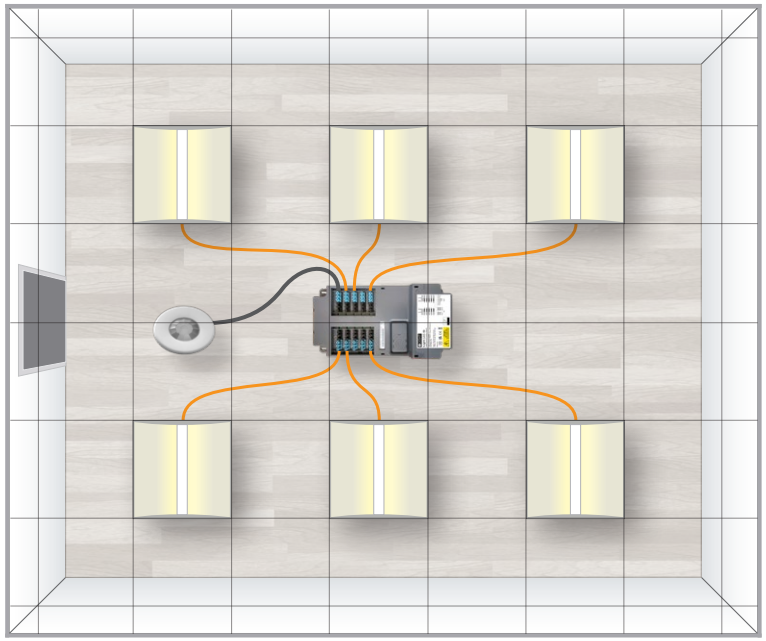
An occupancy sensor is programmed to switch the lighting on to full brightness when presence is detected and the space occupied.

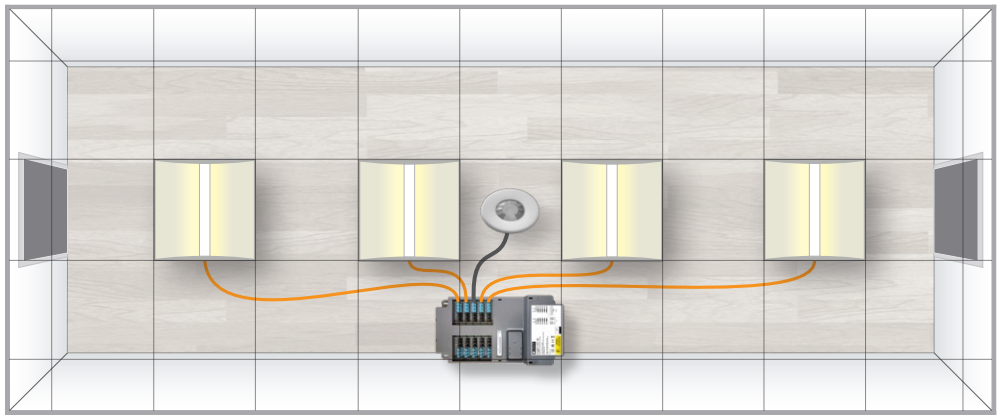
When the space is unoccupied, the lighting level will dim down to an intermediate level for a time before switching off, alerting anyone occupying the space that the lights will soon switch off. The levels can be configured to suit and set with the programming handset.

This application is ideally suited in areas where the lighting should not suddenly switch off when the space is unoccupied. This could be implemented in WCs, stairwells and circulation routes, where extra safety measures are required.

- Stairwells
- Circulation routes
- WCs

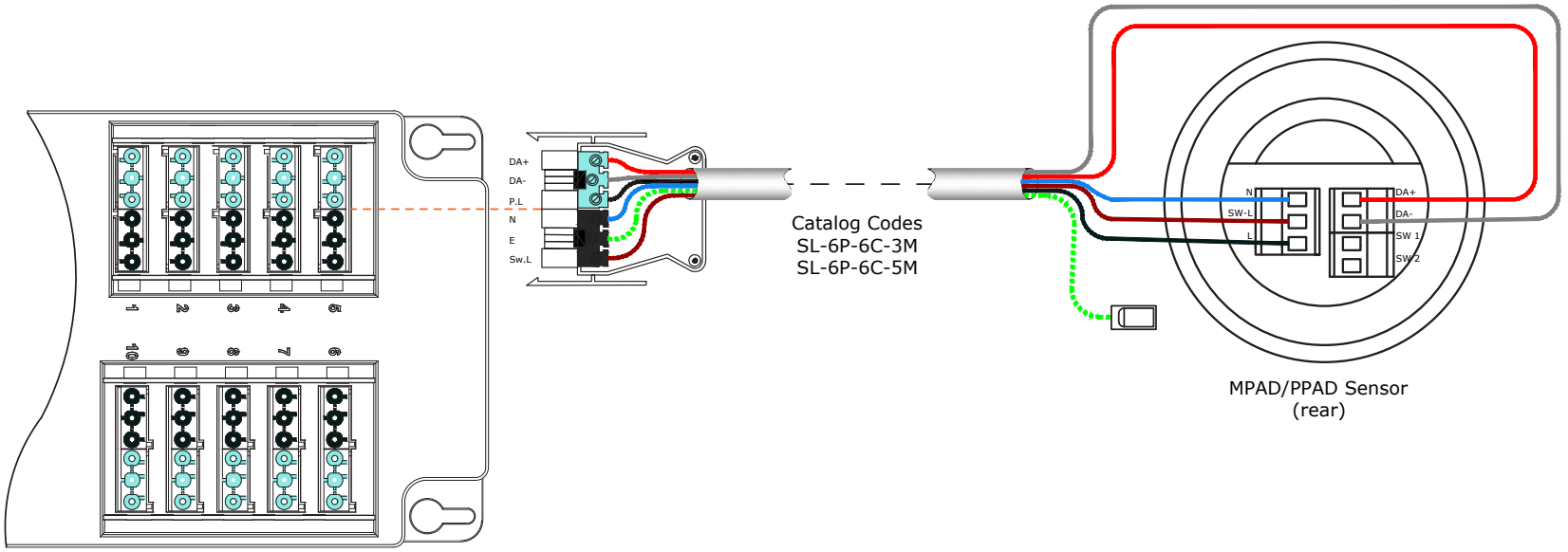
Offices Education Research Care Homes



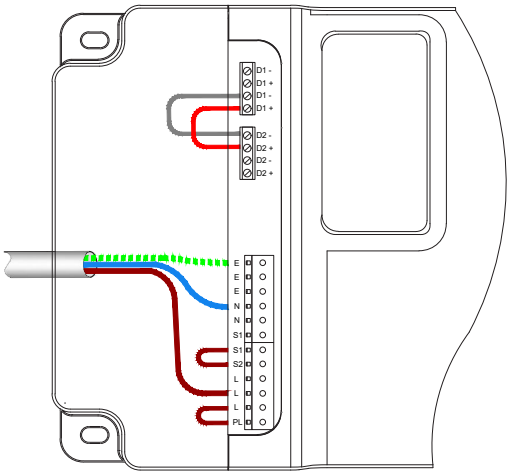


DALI Dimming - Application 4

Connection Wiring Diagram



Output 1-10 - Dimmed



iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
PPAD-C-DALI-230V	PIR - Presence/Absence DALI Dim & 230V Switching
MPAD-C-A-DALI-230V	Microwave - Presence/Absence DALI Dim & 230V Switching - Adjustable
LUPX-6P-5C-3M	6-pole Luminaire Lead - 5-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-5C-5M	6-pole Luminaire Lead - 5-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-6C-3M	6-pole Luminaire Lead - 6-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-6C-5M	6-pole Luminaire Lead - 6-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
SL-6P-5C-3M	Sensor Lead - 5-core 3 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
SL-6P-5C-5M	Sensor Lead - 5-core 5 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
HHIR-LCD-PROG	Infrared Programming Handset with LCD display
HHIR-PROG	Infrared Programming Handset

DALI Dimming - Application 5

Switch Dim

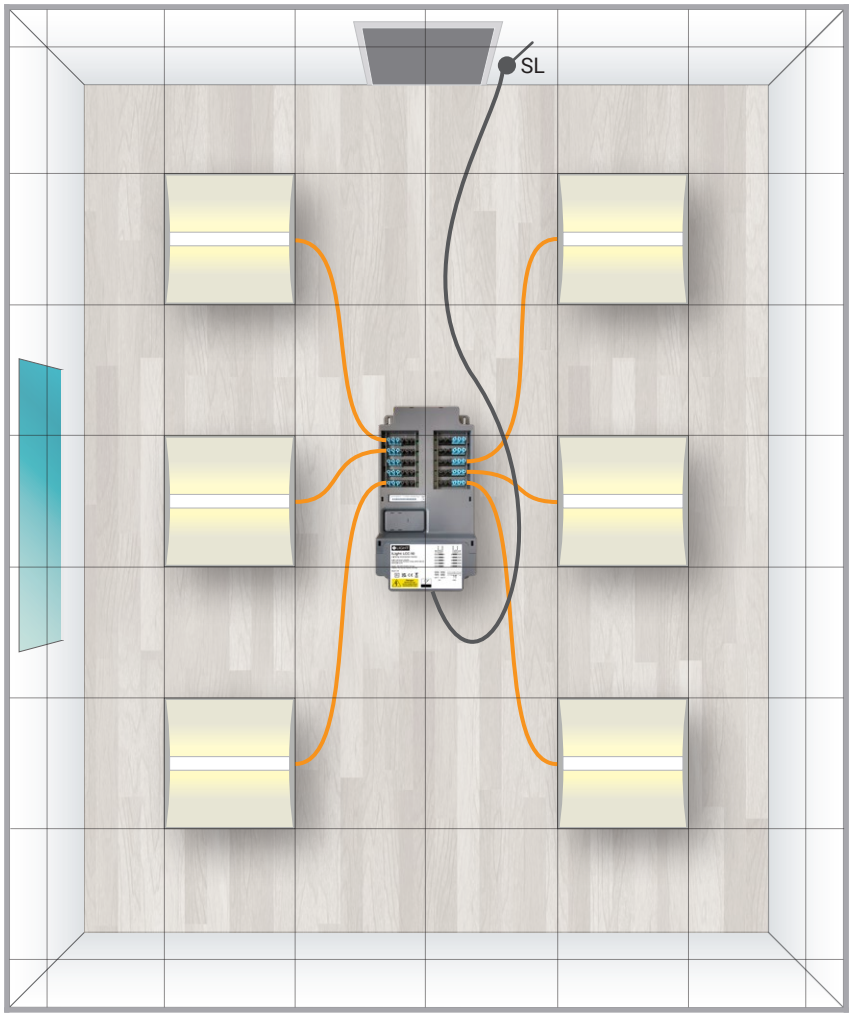
The LCC-10 provides connection for switch dim applications. This solution is typically applied in spaces without occupancy control where a single position retractive switch is required to dim the lighting.

The luminaries need to be specified as `switch dim' or `touch dim', subject to the manufacturer's terminology, as the internal wiring configuration of the driver differs from a DALI installation.

When the switch is pressed and held, it will raise or lower the lighting level. A second press and hold will dim the lighting in the opposite direction, alternating between dim up & dim down. A quick press will switch the lighting on or off.

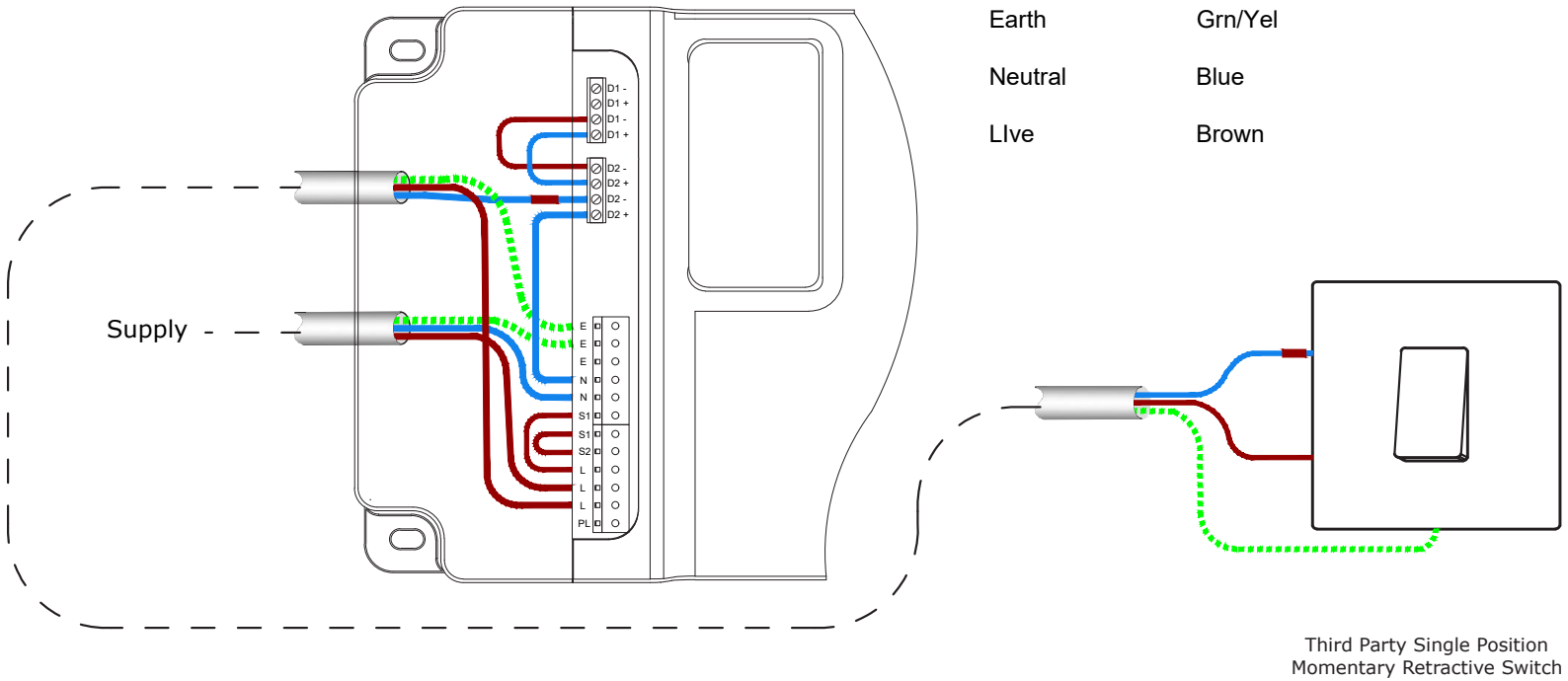
- Rooms which require dimming, without any occupancy control
- Consulting rooms
- Examination rooms
- Laboratories

Healthcare Veterinary Research



DALI Dimming - Application 5

Connection Wiring Diagram



Earth	Grn/Yel
Neutral	Blue
LIve	Brown

Third Party Single Position
Momentary Retractive Switch

iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
LUPX-6P-5C-3M	6-pole Luminaire Lead - 5-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-5C-5M	6-pole Luminaire Lead - 5-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-6C-3M	6-pole Luminaire Lead - 6-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-6C-5M	6-pole Luminaire Lead - 6-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
ACCPL-6P-01-B	6-pole line Plug Connector - Blue/Black (LCMD/LCC) - Black Shell
ACCPL-6P-01-R	6-pole line Plug Connector - Blue/Black (LCMD/LCC) - Red Shell

DALI Dimming - Application 6

DALI, & fixed output, absence detection with maintained illuminance

The LCC-10 supports two channels of control and the independent dimming and switching of two groups of five outputs.

This can be particularly useful where dimming of the luminaries alongside windows is required to meet building regulations.
The two groups of lights are controlled with two, two position retractive switches, one controlling the dimming, the other the switching.

An occupancy sensor in the space can still provide presence and/or absence detection.

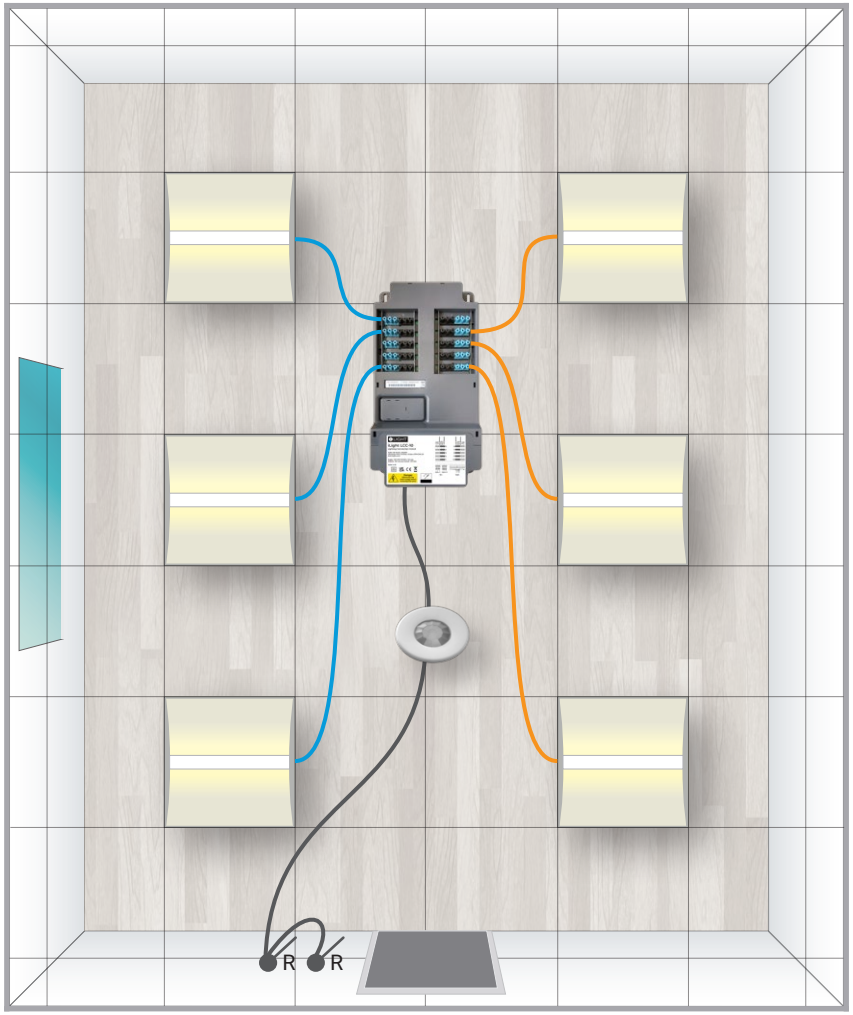
Ideally suited to design & build projects, where DALI is not required throughout.

- Meeting rooms
- Cellular offices
- Small Receptions

Offices

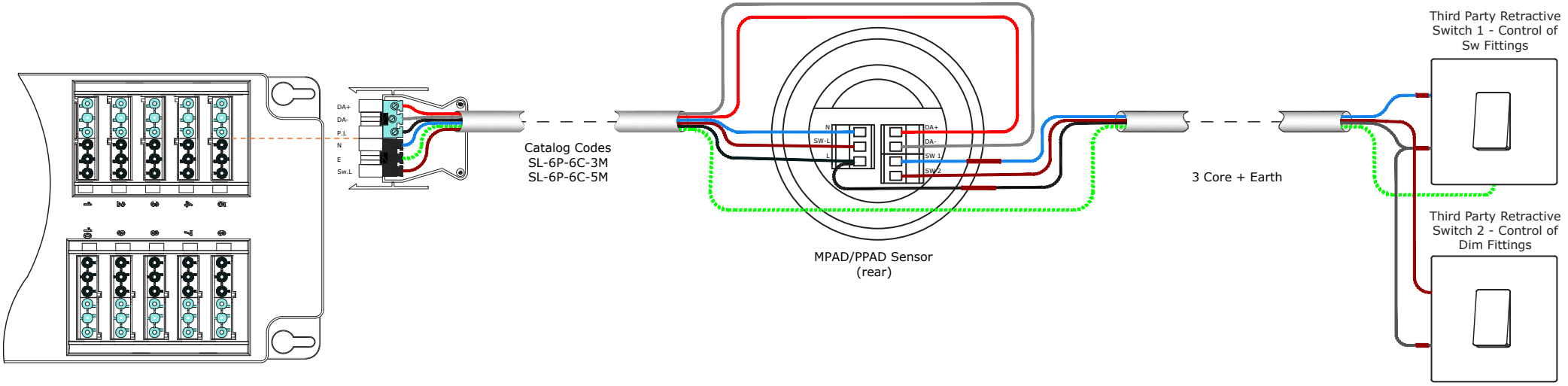
Healthcare

Education

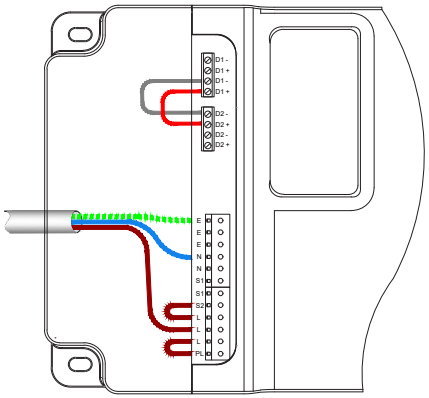


DALI Dimming - Application 6

Connection Wiring Diagram



Output 1-5 - Switched
Output 6-10 - Dimmed



iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
PPAD-C-DALI-230V	PIR - Presence/Absence DALI Dim & 230V Switching
MPAD-C-A-DALI-230V	Microwave - Presence/Absence DALI Dim & 230V Switching - Adjustable
LUPX-6P-3C-3M	6-pole Luminaire Lead - 3-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-3C-5M	6-pole Luminaire Lead - 3-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-4C-3M	6-pole Luminaire Lead - 4-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-4C-5M	6-pole Luminaire Lead - 4-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6P-5C-3M	6-pole Luminaire Lead - 5-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-5C-5M	6-pole Luminaire Lead - 5-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-6C-3M	6-pole Luminaire Lead - 6-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-6C-5M	6-pole Luminaire Lead - 6-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
SL-6P-5C-3M	Sensor Lead - 5-core 3 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
SL-6P-5C-5M	Sensor Lead - 5-core 5 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Dimming Applications)
HHIR-LCD-PROG	Infrared Programming Handset with LCD display
HHIR-PROG	Infrared Programming Handset

Non-Dimmable - Application 7

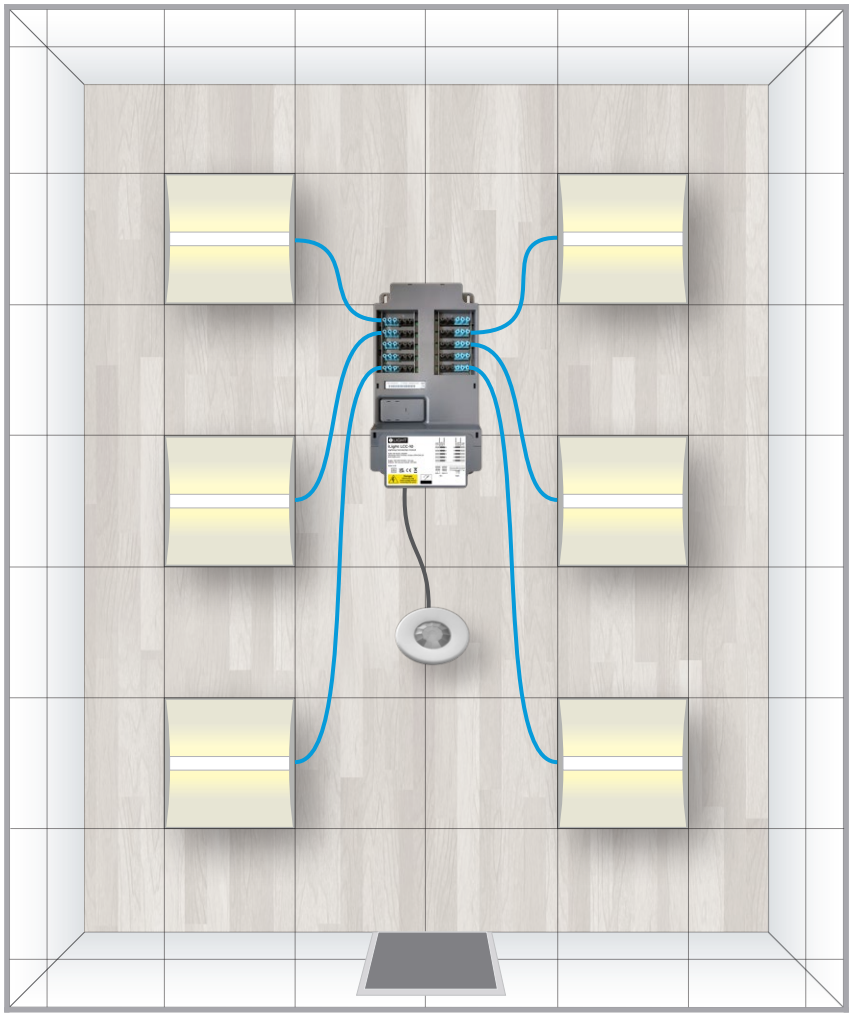
Presence Detection On/Off

An occupancy sensor is programmed to provide presence and absence detection. Switching lighting on when the space is occupied and ensuring lighting is switched off when the room is unoccupied.

Time adjustment is available up to 99 minutes, in increments of 1 minute. A time out of 20 minutes is set as default.

The timings can be configured to suit and set with the programming handset - HHIR-LCD-PROG.

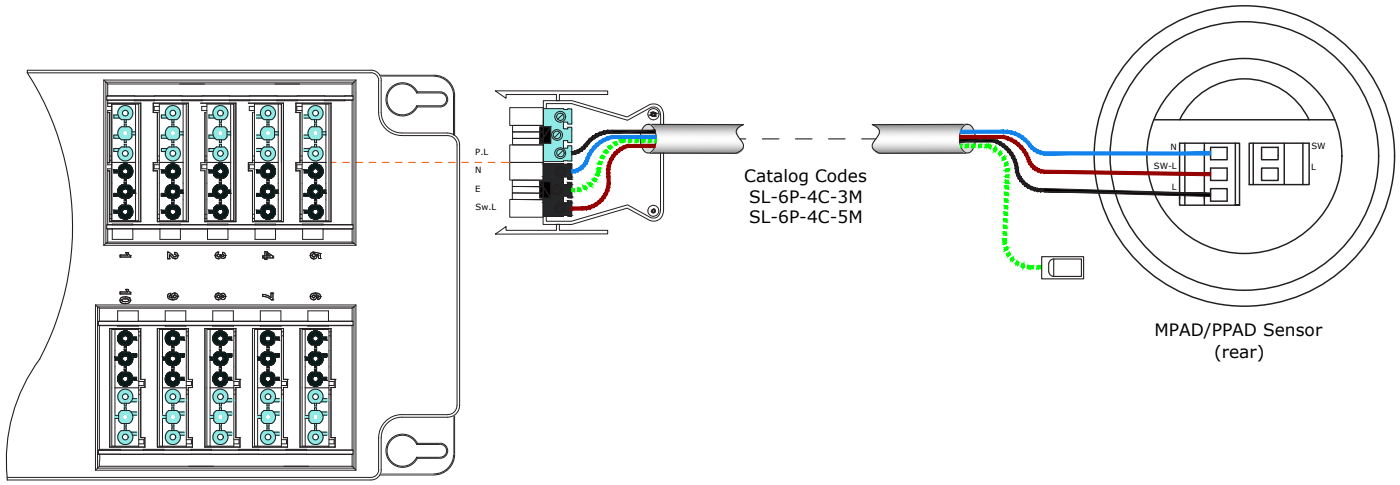
- Warehouses
- WCs
- Store rooms
- Internal meeting rooms with no daylight
- Lobby areas



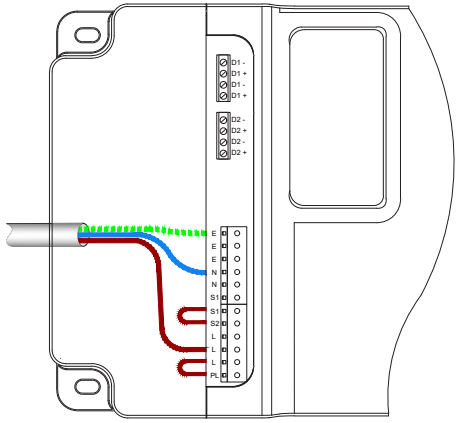
Industrial Offices Education Research

Non-Dimmable - Application 7

Connection Wiring Diagram



Output 1-10 - Switched



iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
PPAD-C-230V	PIR - Presence/Absence 230V Switching
PPAD-C-HB-230V	PIR - High Bay Presence/Absence 230V Switching
MPAD-C-230V	Microwave - Presence/Absence 230V Switching
LUPX-6P-3C-3M	6-pole Luminaire Lead - 3-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-3C-5M	6-pole Luminaire Lead - 3-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-4C-3M	6-pole Luminaire Lead - 4-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-4C-5M	6-pole Luminaire Lead - 4-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
SL-6P-4C-3M	Sensor Lead - 4-core 3 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Switching Applications)
SL-6P-4C-5M	Sensor Lead - 4-core 5 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Switching Applications)
HHIR-LCD-PROG	Infrared Programming Handset with LCD display
HHIR-PROG	Infrared Programming Handset

Non-Dimmable - Application 8

Absence Detection On/Off

A single position retractive switch provides manual control and enables the user to switch lights on or off.

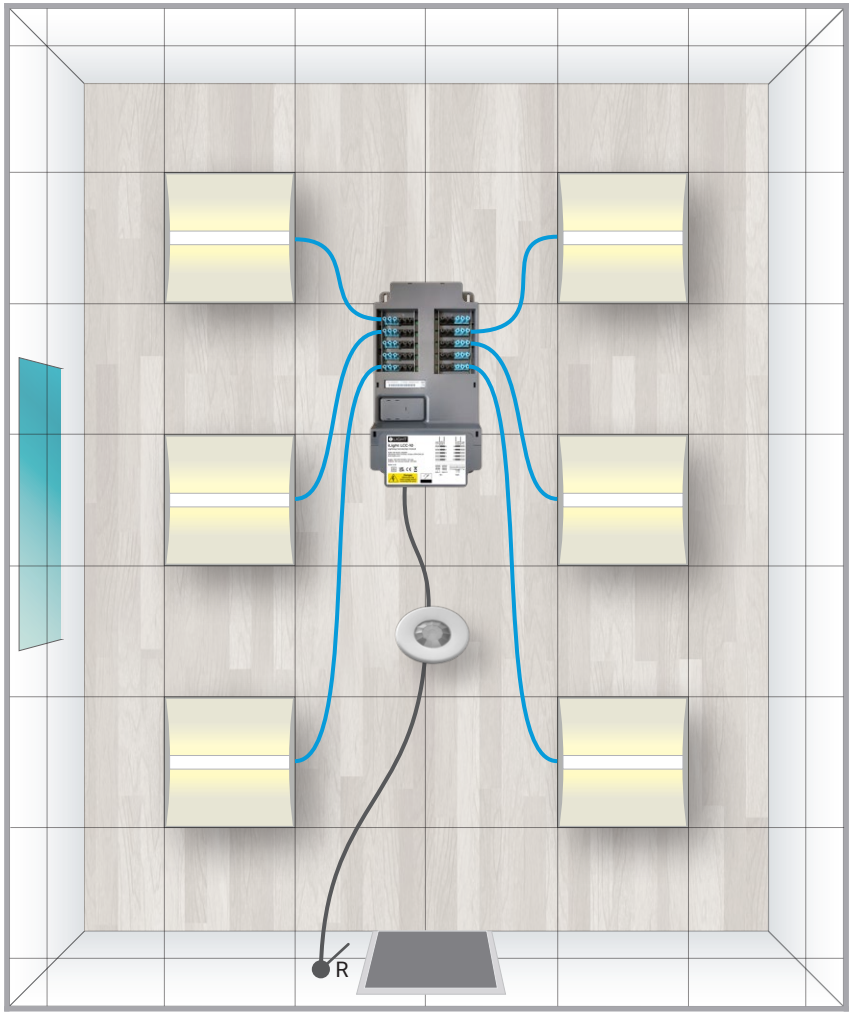
An occupancy sensor is programmed to provide absence detection ensuring lighting is switched off when the room is unoccupied. A Lux-level threshold can be programmed to ensure lighting is switched off when there is adequate daylight present in the space.

Time adjustment is available up to 99 minutes, in increments of 1 minute. A time out of 20 minutes set as default.

The timings and lux levels can be configured to suit and set with the programming handset - HHIR-LCD-PROG.

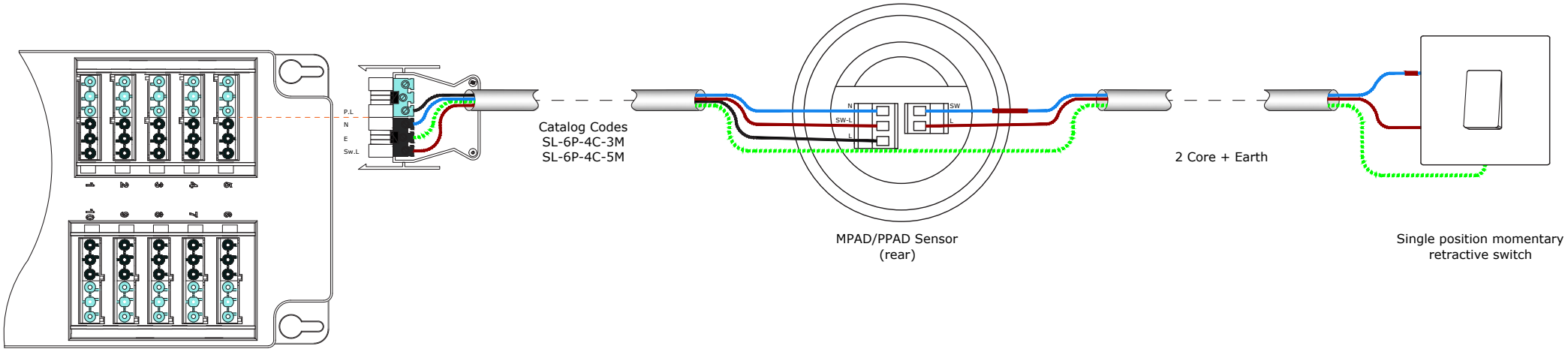
- Meeting Rooms
- Cellular Offices
- Small Receptions
- Patient Rooms
- Doctors Surgeries
- Laboratories
- Consulting Rooms
- Warehouses
- Store Rooms

Industrial Offices Education Research

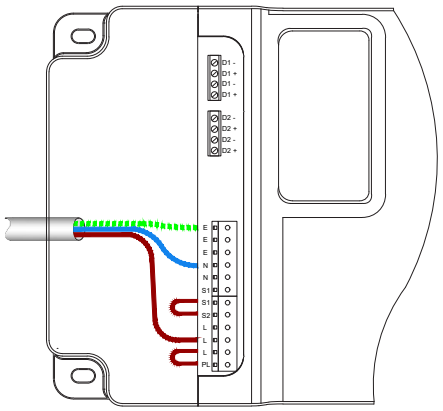


Non-Dimmable - Application 8

Connection Wiring Diagram



Output 1-10 - Switched



iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
PPAD-C-230V	PIR - Presence/Absence 230V Switching
PPAD-C-HB-230V	PIR - High Bay Presence/Absence 230V Switching
MPAD-C-230V	Microwave - Presence/Absence 230V Switching
LUPX-6P-3C-3M	6-pole Luminaire Lead - 3-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-3C-5M	6-pole Luminaire Lead - 3-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-4C-3M	6-pole Luminaire Lead - 4-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-4C-5M	6-pole Luminaire Lead - 4-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
SL-6P-4C-3M	Sensor Lead - 4-core 3 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Switching Applications)
SL-6P-4C-5M	Sensor Lead - 4-core 5 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Switching Applications)
HHIR-LCD-PROG	Infrared Programming Handset with LCD display
HHIR-PROG	Infrared Programming Handset

Non-Dimmable - Application 9

Absence Detection Across Two Rooms

Single position retractive switches provides manual control and enables the user to switch lights on or off.

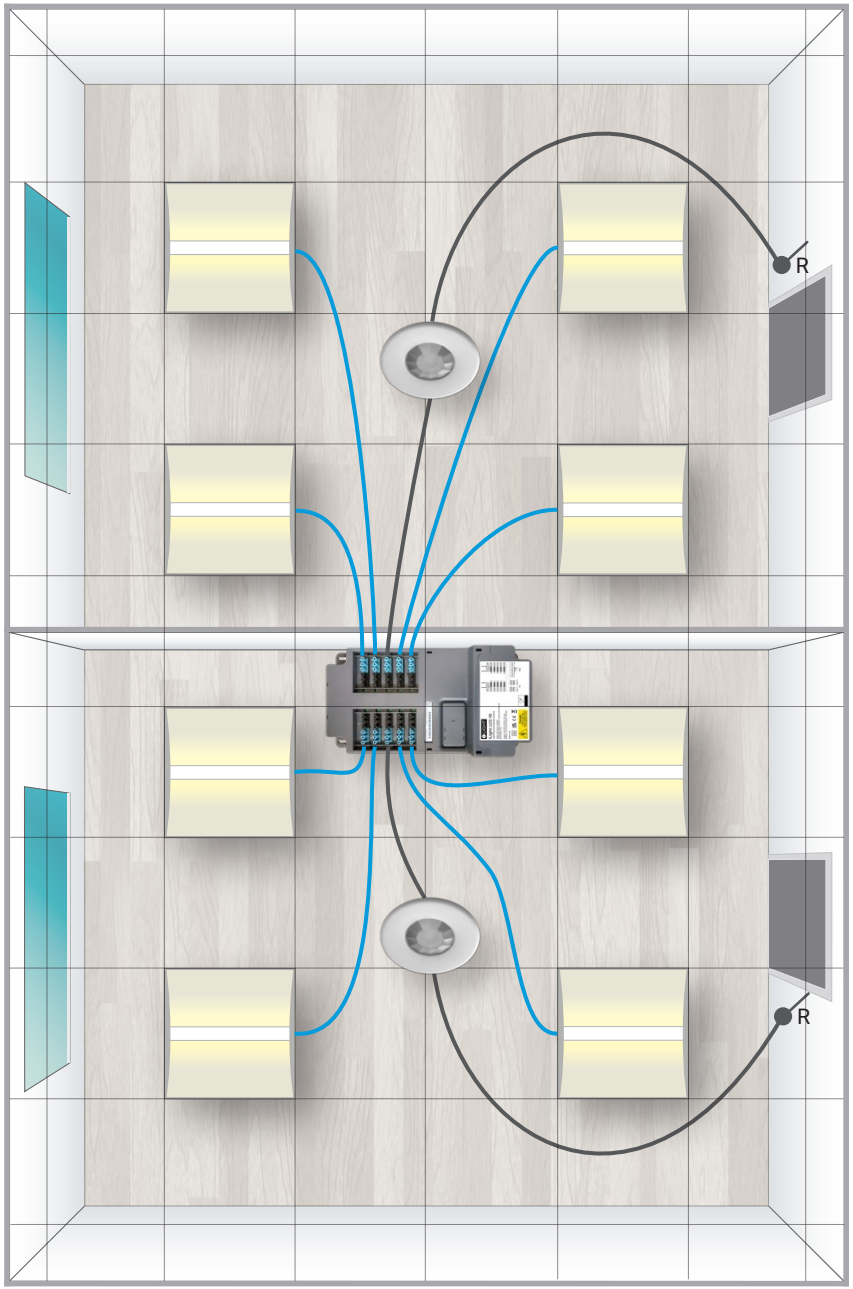
An occupancy sensor is programmed to provide absence detection ensuring lighting is switched off when the room is unoccupied.
A Lux-level threshold can be programmed to ensure lighting is switched off when there is adequate daylight present in the space.

Time adjustment is available up to 99 minutes, in increments of 1 minute. A time out of 20 minutes set as default.
The timings and lux levels can be configured to suit and set with the programming handset - HHIR-LCD-PROG.

The LCC-10 supports two channels of control and the independent switching of two groups of five outputs.

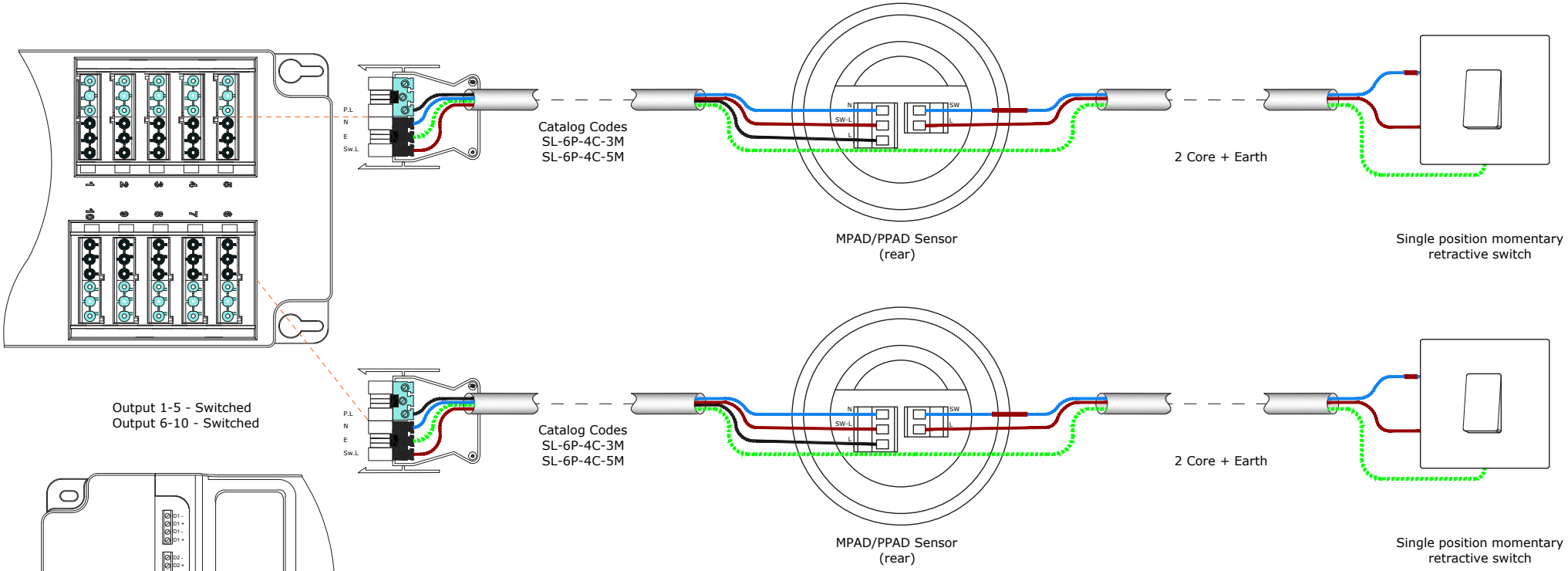
- Meeting Rooms
- Cellular Offices
- Small Receptions
- Patient Rooms
- Doctors Surgeries
- Laboratories
- Consulting Rooms
- Warehouses
- Store Rooms

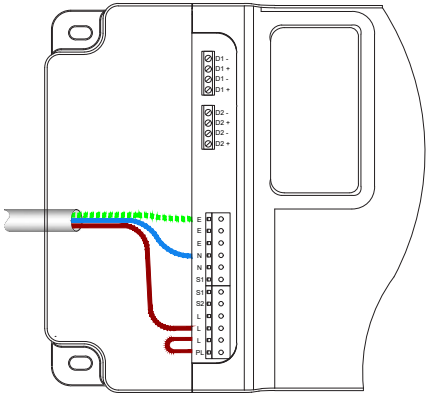
Industrial Offices Education Research



Non-Dimmable - Application 9

Connection Wiring Diagram





iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
PPAD-C-230V	PIR - Presence/Absence 230V Switching
PPAD-C-HB-230V	PIR - High Bay Presence/Absence 230V Switching
MPAD-C-230V	Microwave - Presence/Absence 230V Switching
LUPX-6P-3C-3M	6-pole Luminaire Lead - 3-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-3C-5M	6-pole Luminaire Lead - 3-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-4C-3M	6-pole Luminaire Lead - 4-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-4C-5M	6-pole Luminaire Lead - 4-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
SL-6P-4C-3M	Sensor Lead - 4-core 3 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Switching Applications)
SL-6P-4C-5M	Sensor Lead - 4-core 5 metre Male - Plug to Phoenix Connectors to suit P/MPAD (Switching Applications)
HHIR-LCD-PROG	Infrared Programming Handset with LCD display
HHIR-PROG	Infrared Programming Handset

Non-Dimmable - Application 10

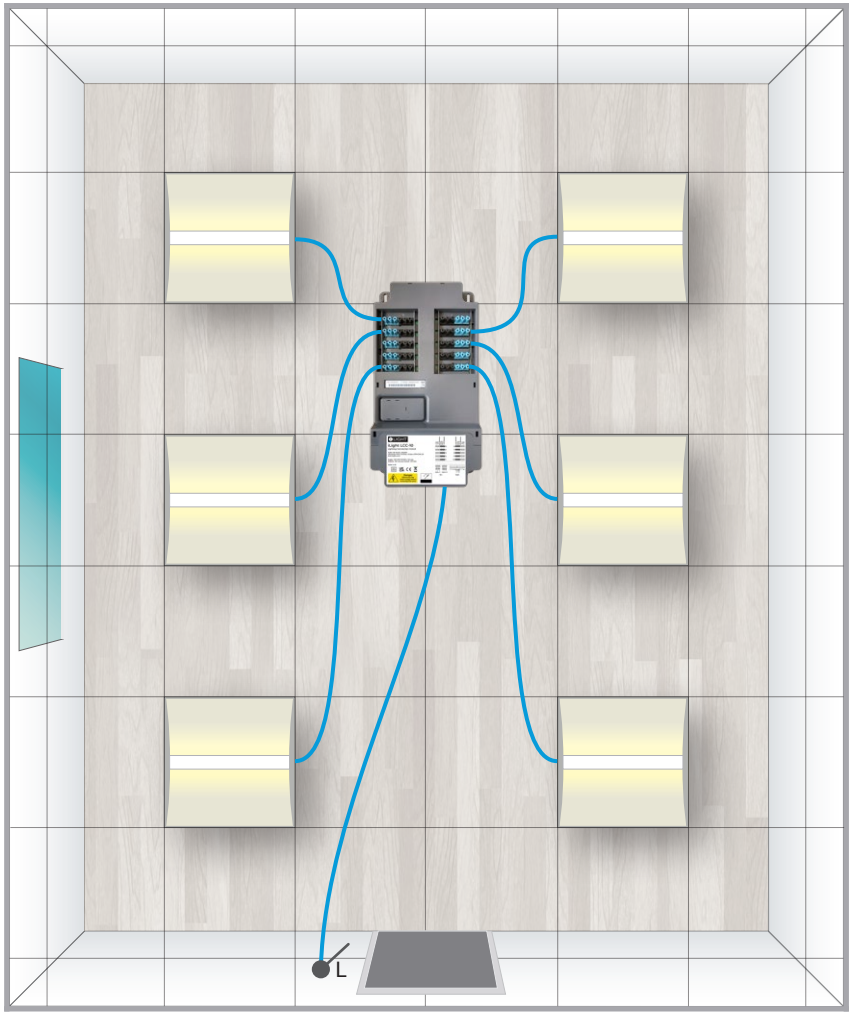
Locally switched with no controls

For rooms requiring conventional control the LCC-1 can be employed to provide pluggable connection points for luminaries. Used in combination with the wide range of supporting wiring accessories for a quick and easy installation.

A standard latching light switch can be installed for switching the lighting on or off.

Multiple LCC-10's can be wired in parallel increasing output capability as required.

- Disabled toilets
- Commercial Kitchens
- Dark rooms



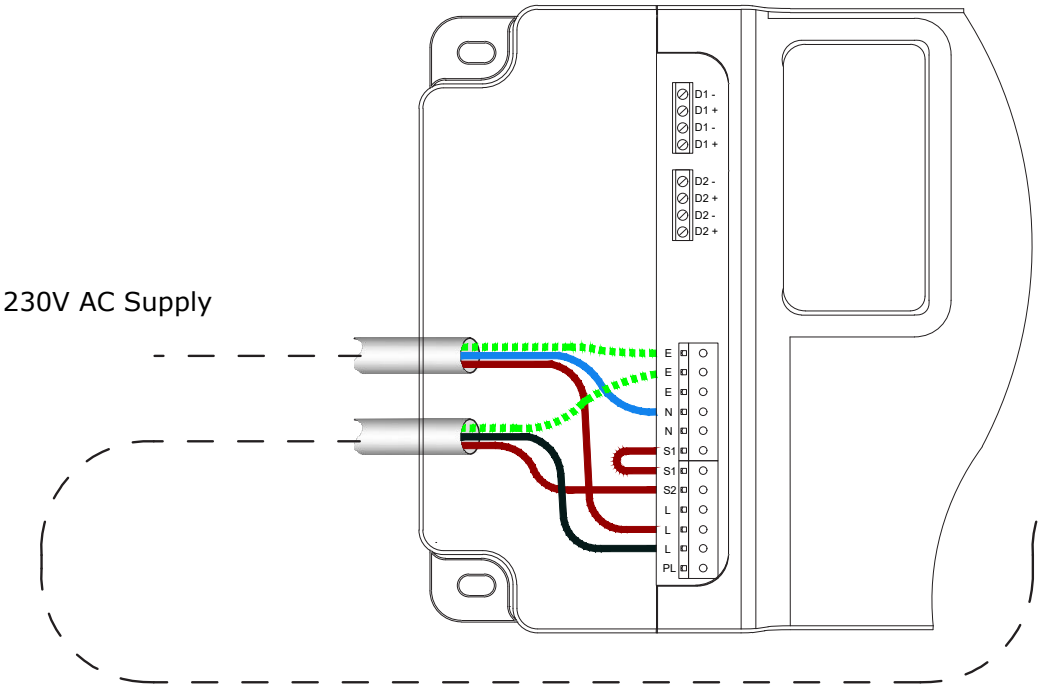
Industrial

Healthcare

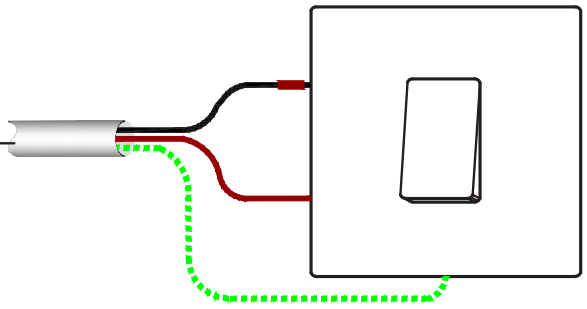
Research

Non-Dimmable - Application 10

Connection Wiring Diagram



Earth	Grn/Yel
Neutral	Blue
LIve	Brown



Single position latching switch

iLight Equipment List

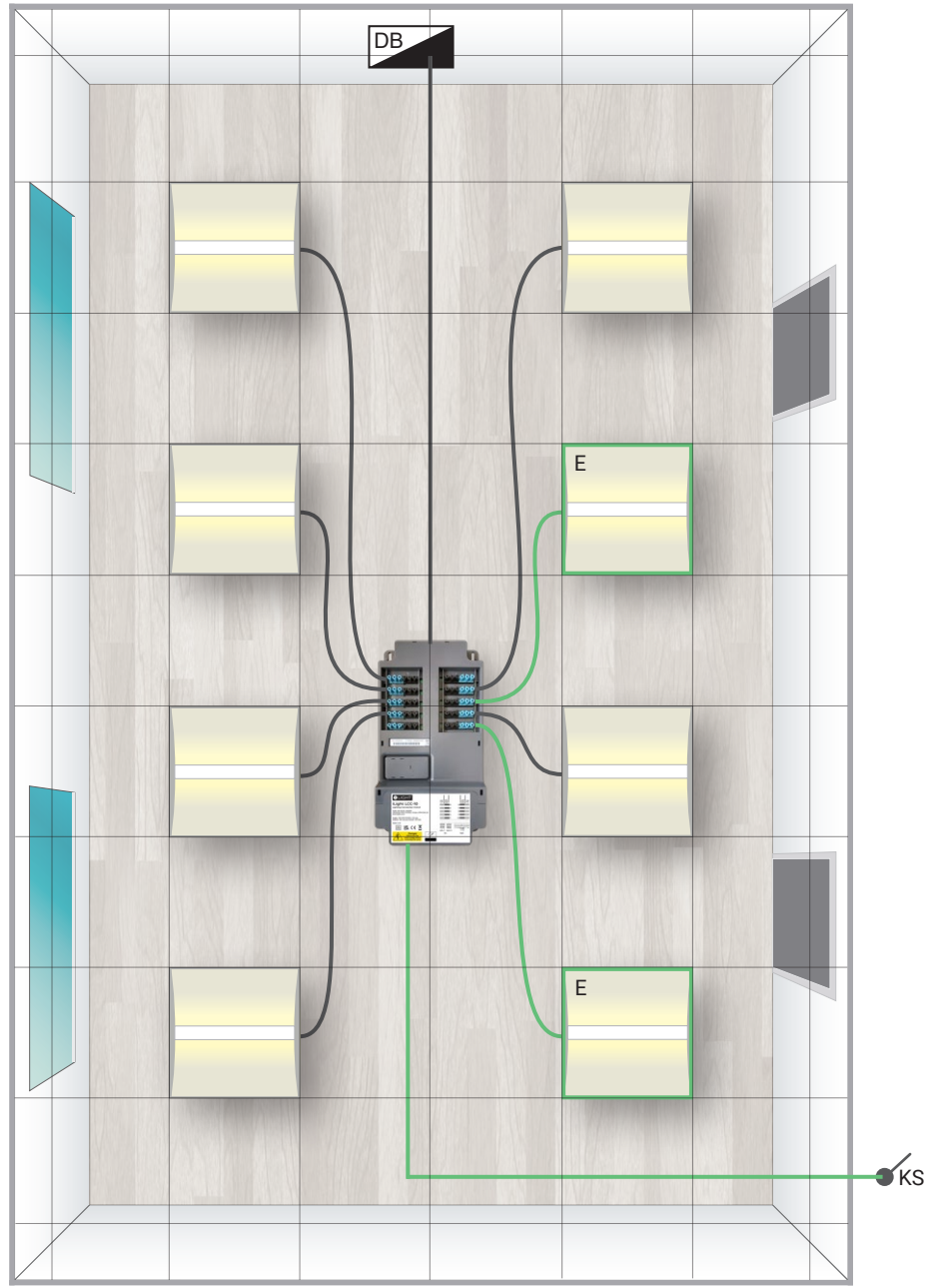
Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
LUPX-6P-3C-3M	6-pole Luminaire Lead - 3-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-3C-5M	6-pole Luminaire Lead - 3-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-4C-3M	6-pole Luminaire Lead - 4-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-4C-5M	6-pole Luminaire Lead - 4-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
HHIR-LCD-PROG	Infrared Programming Handset with LCD display
HHIR-PROG	Infrared Programming Handset

Emergency - Application 11

Key Switch Emergency Test

The LCC-10 provides a dedicated terminal for permanent live, allowing for the connection of a conventional keys switch. This allows the supply to emergency luminaries to be interrupted for the purpose of testing.

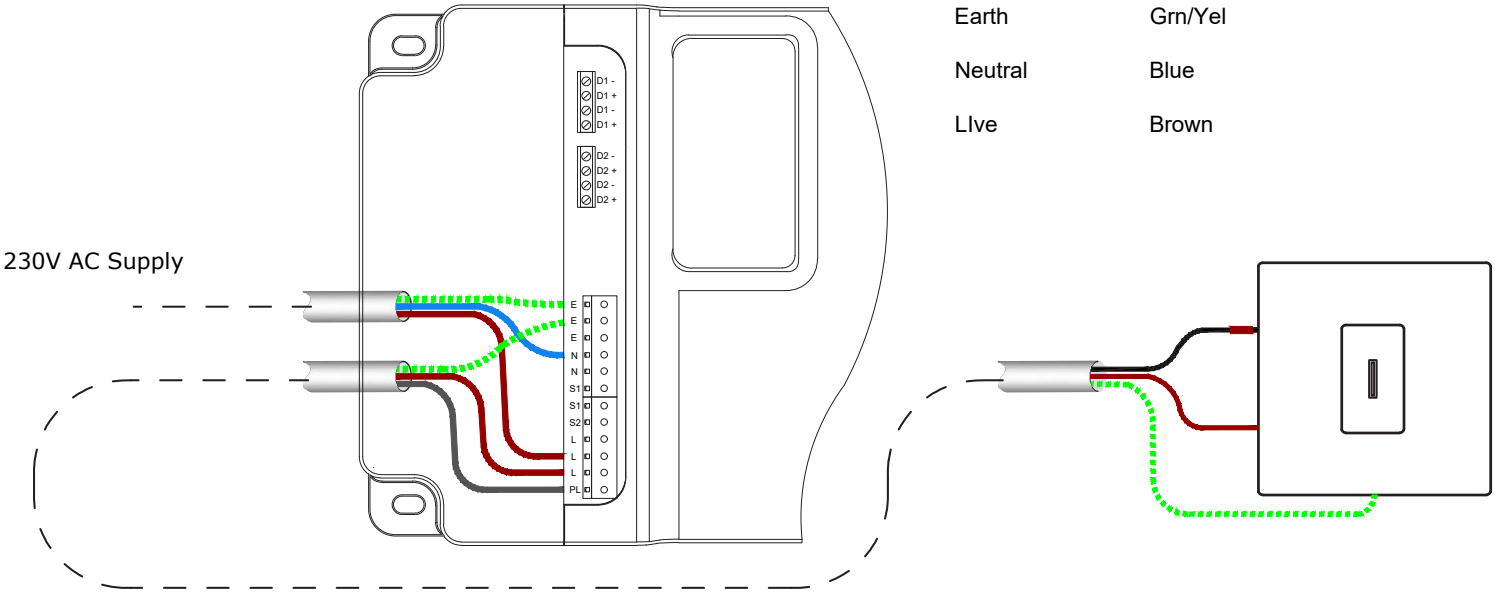
The LCC-10 supports two channels of control and the independent switching and dimming of two groups of five outputs or all ten outputs to be linked. In either configuration all ten outputs are served by the same permanent live.



Offices Education Research Healthcare

Emergency - Application 11

Connection Wiring Diagram



Earth	Grn/Yel
Neutral	Blue
LIve	Brown

Emergency Test Key Switch

iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
LUPX-6P-5C-3M	6-pole Luminaire Lead - 5-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-5C-5M	6-pole Luminaire Lead - 5-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-6C-3M	6-pole Luminaire Lead - 6-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-6C-5M	6-pole Luminaire Lead - 6-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
ACCPL-6P-01-B	6-pole line Plug Connector - Blue/Black (LCMD/LCC) - Black Shell
ACCPL-6P-01-R	6-pole line Plug Connector - Blue/Black (LCMD/LCC) - Red Shell

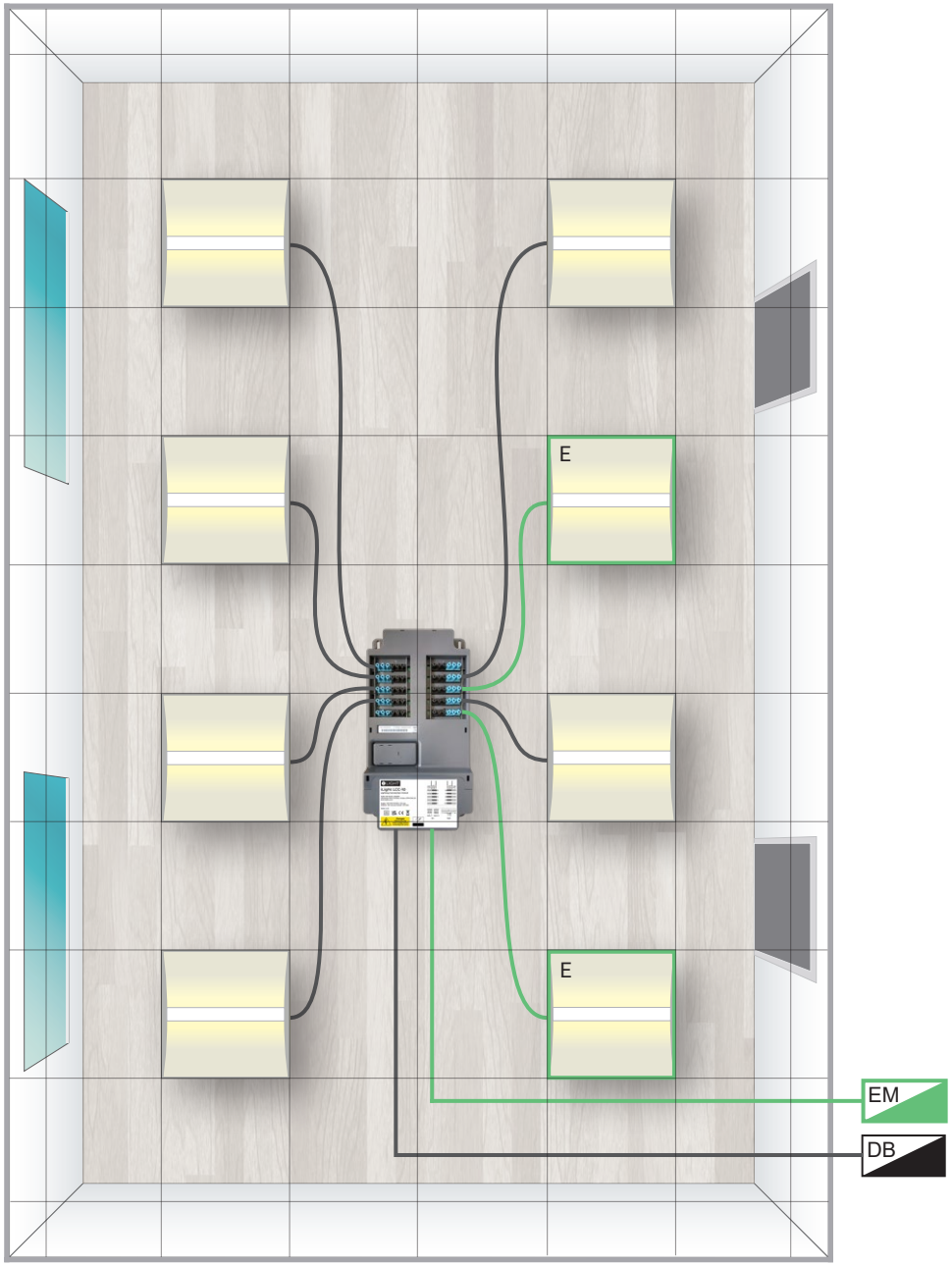
Emergency - Application 12

Emergency Central Battery

Hospitals and data centres require a UPS system for critical areas, ensuring there is no interruption to the power supply, during a mains power failure.

The LCC-10 provides a dedicated terminal for permanent live, allowing for the connection of a separate maintained or specific emergency supply from a central battery system or other un-interruptible source.

The LCC-10 supports two channels of control and the independent switching and dimming of two groups of five outputs or all ten outputs to be linked. In either configuration all ten outputs are served by the same permanent live.

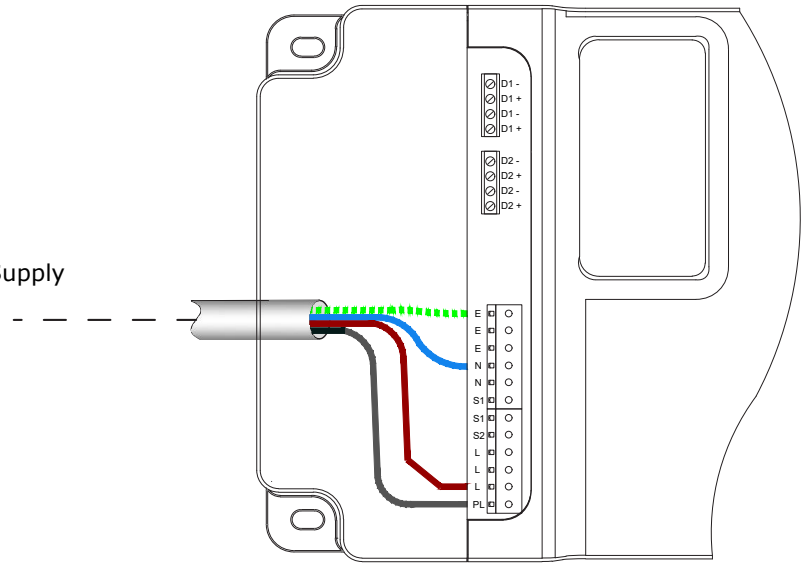


Emergency - Application 12

Connection Wiring Diagram

Switching Arrangement Dependant on application

230V AC Supply



Earth	Grn/Yel
Neutral	Blue
LIve	Brown
Permanent/EM Live	Black

iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
LUPX-6P-5C-3M	6-pole Luminaire Lead - 5-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-5C-5M	6-pole Luminaire Lead - 5-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-6C-3M	6-pole Luminaire Lead - 6-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-6C-5M	6-pole Luminaire Lead - 6-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
ACCPL-6P-01-B	6-pole line Plug Connector - Blue/Black (LCMD/LCC) - Black Shell
ACCPL-6P-01-R	6-pole line Plug Connector - Blue/Black (LCMD/LCC) - Red Shell

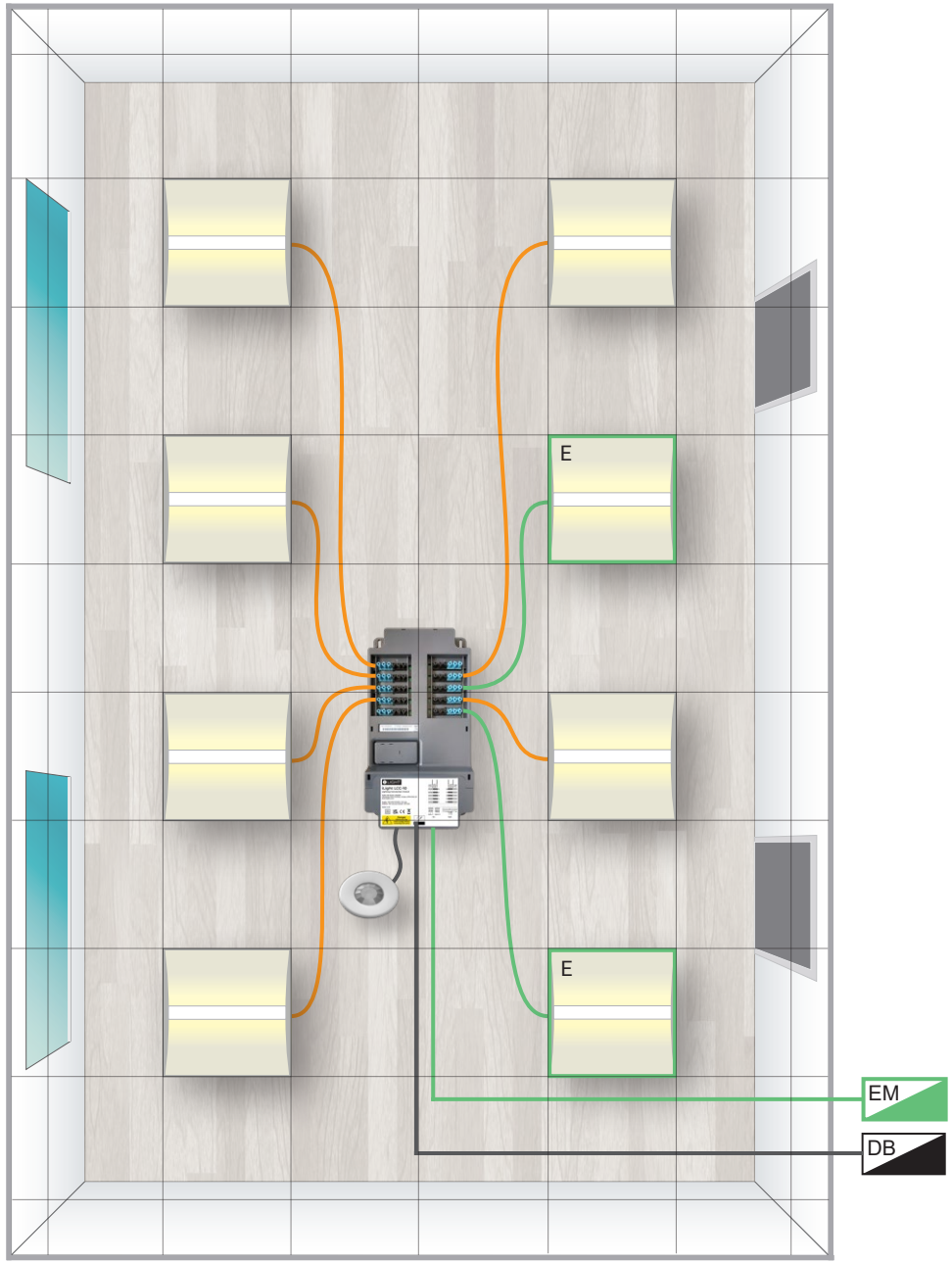
Emergency - Application 13

Emergency Central Battery (DALI dimmable)

Hospitals and data centres require a UPS system for critical areas, ensuring there is no interruption to the power supply, during a mains power failure.

The LCC-10 provides a dedicated terminal for permanent live, allowing for the connection of a separate maintained or specific emergency supply from a central battery system or other un-interruptible source. DALI connections can be made simultaneously to the electrical and emergency supplies.

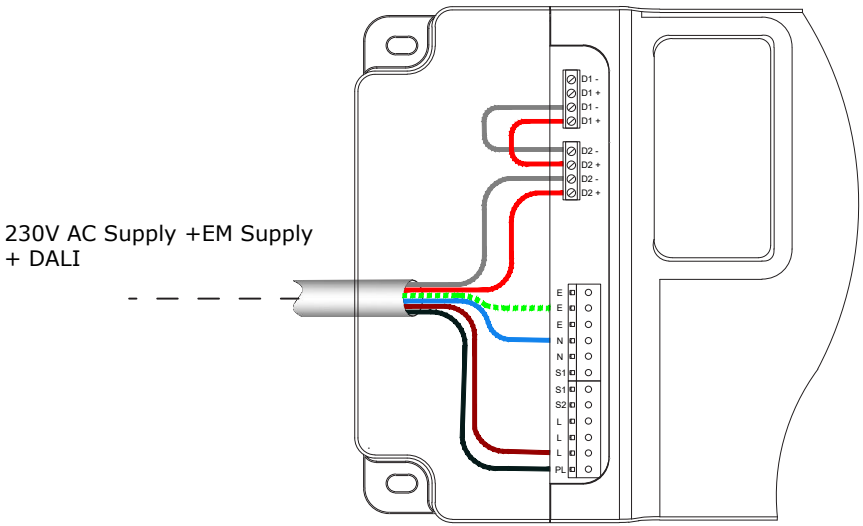
During change over from normal operation to the back up supply the DALI line must also be disconnected. These applications call for the use of an ACM (Automatic Changeover Module).



Emergency - Application 13

Connection Wiring Diagram

Switching Arrangement Dependant on application



Earth	Grn/Yel
Neutral	Blue
LIve	Brown
Permanent Live	Black
DALI +	Colour Determined by installation
DALI -	Colour Determined by installation

iLight Equipment List

Part Number	Description
LCC-10	10 Output - 6-Pole - Lighting Connection Centre
LUPX-6P-5C-3M	6-pole Luminaire Lead - 5-core 3 metre - Plug to Open Ends 1.0mm² cable
LUPX-6P-5C-5M	6-pole Luminaire Lead - 5-core 5 metre - Plug to Open Ends 1.0mm² cable
LUPX-6PR-6C-3M	6-pole Luminaire Lead - 6-core 3 metre - Plug to Open Ends - Red Connector 1.0mm²
LUPX-6PR-6C-5M	6-pole Luminaire Lead - 6-core 5 metre - Plug to Open Ends - Red Connector 1.0mm²
ACCPL-6P-01-B	6-pole line Plug Connector - Blue/Black (LCMD/LCC) - Black Shell
ACCPL-6P-01-R	6-pole line Plug Connector - Blue/Black (LCMD/LCC) - Red Shell

Quick Start Commissioning

With the HHIR-LCD-PROG

All programming requires the following functions

- Press & hold the on/off button to switch the handset on
- Click the right arrow to go into the standalone menu
- Select V3 products, using the navigation arrows
- Select PRM for switching PIRs or DD for DALI dimmable PIRs
- Detector parameters

Detector parameters (most commonly used features)
The following functions can be applied to any detector, switching or dimming.

- Time-out: Min is 1 minute, max is 99 minutes
- Detection mode: Presence operation auto on /auto off or absence operation manual on, auto off
- Sensor sensitivity: When the sensor is on or off (1 is min, 9 is max)
- Walk test on or off: When on, the led in the sensor flashes when movement is detected
- Disabling the detector: Used when you only want the photocell to work. This can be used when daylight dimming a row of luminaires running adjacent to the window or with a non dimming detector. When a lux level is reached the luminaires will switch off.

HHIR-LCD-PROG

Navigate
up/down left/right arrows.

Read Back
Reads back the selected parameters when in the active menu.

Return Key
Press to go back to the previous menu.

Numeric Pad
Used to enter time outs, sensor sensitivity and lux levels.

On / Off Button
Press and hold to switch the handset on.

Home Button
Takes you back to the beginning of the navigation.

Send Button
Used for sending infra-red commands to the sensor.

+ Yes / - No
Can be used to toggle between absence and presence mode.

Commissioning

Adjusting the time out Go to detector parameters

- Press the down arrow to the time out
- Type in the numerical keypad the number of minutes
- Aim the handset at the sensor and press the send button
- The led will flash

Adjust the sensitivity

- Go to detector parameters
- Press the down arrow to the sensitivity on or sensitivity off
- Type in the numerical keypad numbers 1 to 9 (9 = max sensitivity)
- Aim the handset at the sensor and press the send button
- The led will flash

Adjust the detection mode absence or presence

- Go to detector parameters
- Press the down arrow to the detection mode
- Type in the numerical keypad the number of minute
- Aim the handset at the sensor and press the send button
- The led will flash

Walk test

- Go to detector parameters
- Press the down arrow to the walk test LED
- Press yes or no on the keypad
- Aim the handset at the sensor and press the send button
- The led will flash

Quick Start Commissioning

With the HHIR-LCD-PROG

Adjusting the lux level (a lux meter is required)

- Go to detector parameters
- Press the down arrow to lux control & press the right arrow
- Type in the numerical keypad a value between 1 and 999 (The numbers represent a percentage and not a lux level. This is why a separate lux meter is required. For setting the light level to around 500 lux, initially set the numerical number to around 650 to 750 and measure the illuminance on the working plan. Increase or decrease the value on the numerical key iby increments of around 25 until you reach your desired lux level . Aim the handset at the sensor and press the send button
- The led will flash

DALI luminaires flashing

- Go to detector parameters
- Press the down arrow to Output Ch.2 (Dim)
- Please note that there are two channels when commissioning the DALI 230V range of detectors. Channel 1 is the relay and channel 2 is the DALI
- Press the right arrow and scroll down the menu to the Gear Type
- Press the +/yes button D-ON (DALI on mode)
- Aim the handset at the sensor and press the send button
- The led will flash

Factory reset

- Go to detector parameters
- Press the down arrow to config
- Scroll to factory reset
- Aim the handset at the sensor and press the send button
- The led will flash

User menu

- Go to standalone
- Select V3 (version 3)
- Select DD for DALI dimming or PRM for switching
- Scroll down detector parameters to the user menu

The user menu options allow you to test the luminaires are switching and dimming

Over-ride-on switches the lights permanently on
Over-ride off switches the lights permanently off
Cancel puts to sensor back into normal operation

Test the lights are dimming

Scene 1 - 100% output
Scene 2 - 50% output
Scene 3 - 25% output
Scene 4 - 25% output

Commissioning

Applications 2 & 3 - DALI Dimming
2 position retractive switch - Adjusting the switch configuration

- Standalone menu
- Select V3 products, using the navigation arrows
- Scroll down to DD for DALI dimmable and press the right arrow
- Detector parameters- press the right arrow
- Scroll down to config-press the right arrow
- Select channel mode- switch & dim together
- Select switch mode-2 position switch together (factory default)
- Aim the handset at the sensor and press the send button
- The led will flash
- The led will flash

Application 6 - DALI Dimming and Switching
2 x 1 position retractive switches - CH-1 switched, CH-2 DALI dimmable.

- Standalone menu
- Select V3 products, using the navigation arrows
- Scroll down to DD for DALI dimmable and press the right arrow
- Detector parameters- press the right arrow
- Scroll down to config-press the right arrow
- Select channel mode- switch & dim separately
- Select switch mode- 1 position switch separate
- Aim the handset at the sensor and press the send button
- The led will flash

Applications 8 & 9 - Switching
1 position retractive switch

- Select V3 products, using the navigation arrows
- Scroll down to DD for DALI dimmable and press the right arrow
- Detector parameters- press the right arrow
- Scroll down to config-press the right arrow
- Select channel mode- switch only
- Select switch mode- 2 position switch together
- Aim the handset at the sensor and press the send button
- The led will flash

Commissioning using the HHIR-PROG

For full programming instructions see our install guide here:

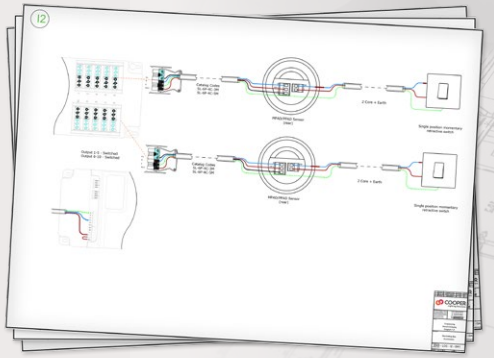
Click or scan QR code

Specification documentation

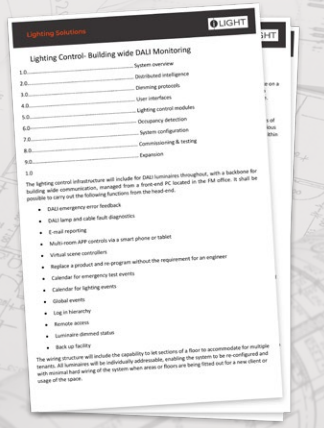
Download everything you need to spec this product and associated system components here:

Click or scan QR code

Lighting Control Equipment Schedules

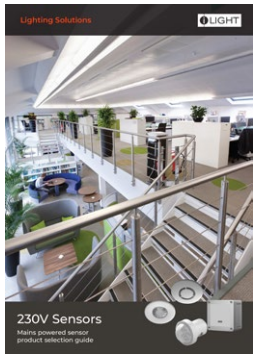


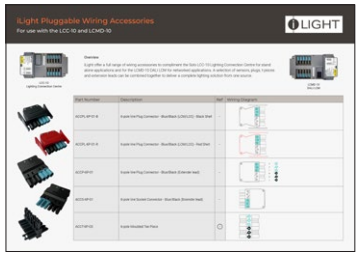
Supporting System Schematics

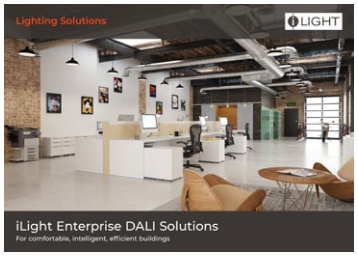


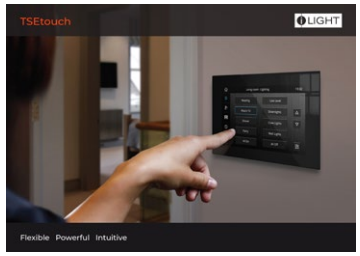
System Specifications

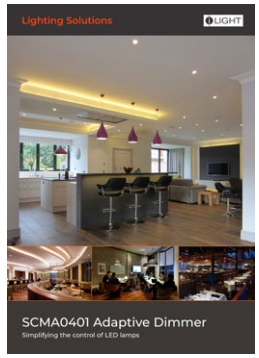
Related iLight literature











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