Installation Guide

LCMD-1000
DALI-2 Lighting Control Module

iLight
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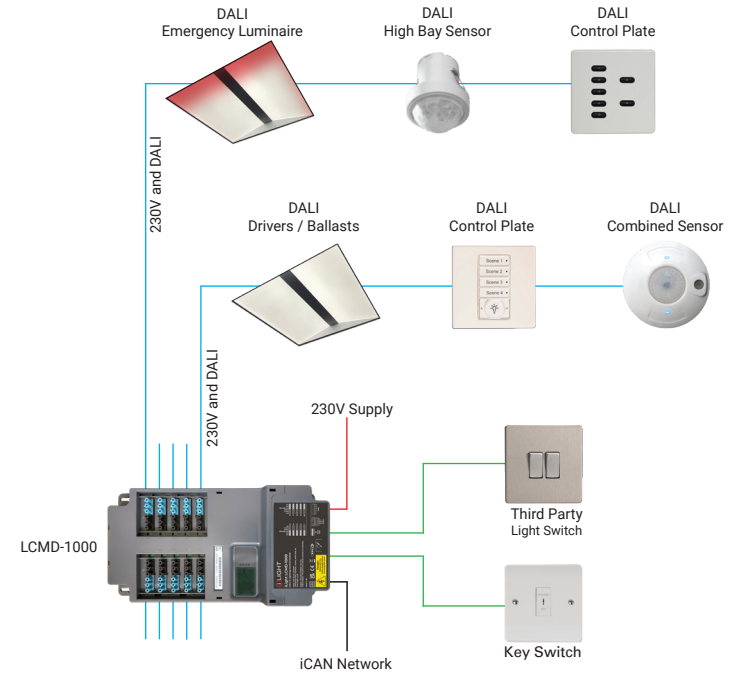e: enquiries@iLight.co.uk
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E&OE. iLight reserve the right to make changes to the equipment without prior notice.
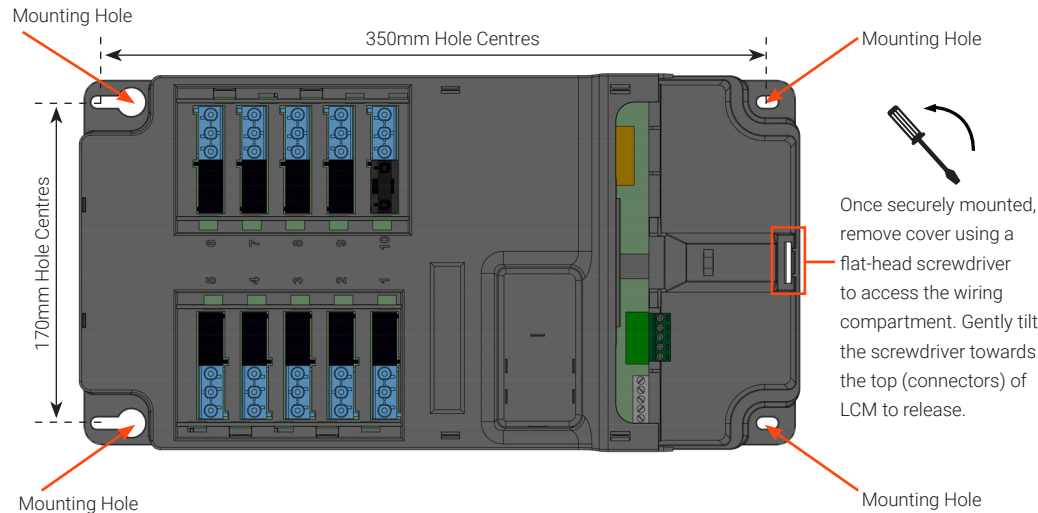© Signify Holding

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Typical Schematic

DALI Emergency Luminaire
DALI High Bay Sensor
DALI Control Plate

230V and DALI

DALI Drivers / Ballasts
DALI Control Plate
DALI Combined Sensor

230V and DALI

230V Supply

LCMD-1000

Third Party Light Switch

Key Switch

iCAN Network

Mounting & Installation

LCMD-1000 must be securely mounted to a suitable surface using the 4 mounting holes provided with fixings suitable for the substrate (Maximum fixing diameter 6mm). The LCM can be mounted in any orientation to cable trays, walls and direct to a ceiling slab. All cables should be independantly secured with appropriate fixing straps in accordance with local electrical regulations. Incoming mains, data and input cables should be installed using suitable compression cable glands to provide strain relief.

Mounting Hole

350mm Hole Centres

Mounting Hole

170mm Hole Centres

Once securely mounted, remove cover using a flat-head screwdriver to access the wiring compartment. Gently tilt the screwdriver towards the top (connectors) of LCM to release.

Mounting Hole

Mounting Hole

Removing Knockouts
The knockouts can be removed with a flat-head screwdriver in 2 simple steps:
1. Place the flat-head screwdriver into the slot of the knockout that is to be removed. The screwdriver must be placed in the slot nearest to the bottom of the enclosure (opposite the cover).
2. Hit the end of the screwdriver to shear the knockout and remove the rest of the knockout by hand if necessary.
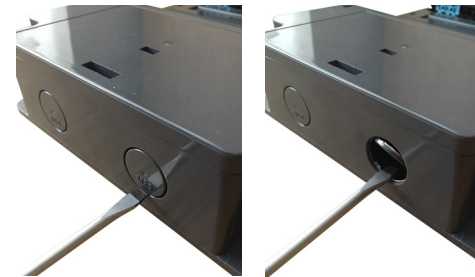
Alternatively an appropriate sized hole saw can be used utilising the drill bit location point at the centre of each knockout.

Mechanical Data

Dimensions: 200.2mm (w) x 382.8mm (h) x 57.5mm (d)
Maximum diameter of fixings: 6mm
Weight: 2.5 kg

Operating temperature: +2ºC to +50ºC

Max storage temperature: +60ºC

Humidity: +5 to 95% non-condensing

Environmental protection: IP20

Electrical Data

Supply: 230VAC +/- 10%   50-60Hz   0.2A Max

Load Protection: Provided by installer

Control Supply: 15V 100mA

Terminal Sizes (Capacity per terminal):
Supply/DALI screw terminals: 2x1mm^2 or 1x 2.5mm^2
Input screw terminals: 0.2mm^2 to 1mm^2
iCANnet™ input/output screw terminals: 5 x 1mm^2

Terminal Torque Settings:
Supply, input, iCANnet terminals: 0.5Nm

Input Cable (VFC) Length: 30m MAX

Installation must be carried out by a suitably qualified

LCMD-1000
DALI Lighting Control Module

Device LEDs and Buttons

Status LED
Green LED flashes – device OK

Data LED
Red LED flashes when messages sent on network
Red LED solid indicates iCANnet network error

Alarm LED
Red LED flashes ON for local initiated alarm
Red LED solid for network initiated alarm

iCAN Network Connections

Function	iCANnet Cable Colours
0V	Black
CAN L	Blue
Shield	Silver
CAN H	White
+V DC	Red

Maximum segment distance: 500m (1640 ft)
Devices per segment: 100 (without bridge or repeater)
Consult iLight for information on alternative cable types.

Network Power Requirements
Nominal operating voltage: 15V DC (12-18V)

IMPORTANT NOTE: Connecting a mains potential cable to the iCAN Network terminals is likley to damage the unit and other devices connected, and invalidate warranty.

Network termination

If the LCMD-1000 is installed as part of a network and is connected as the last device on the iCAN network, the supplied 120ohm network termination resistor will need to be added.

Install the supplied 120ohm resistor between CAN-H & CAN-L in addition to the network wiring.

iCANnet Connection

0V
CAN-L
SHIELD
CAN-H
+V

iCANnet

Network Terminator 120ohms
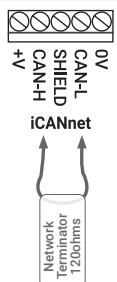
Load Data

DALI line outputs: Nominal 14V, max current 250mA supply per DALI line output. Guaranteed minimum current 195mA

Automatic shut-down and restart after short-circuit (maximum 1 per bus) according to IEC 62386 Part 101

DALI Compliance: DALI-2 Application controller (Multi Master) IEC 62386 Part 101

Supports: Part 201 to 208, 209 partial.

See DALI Alliance (DiiA) website for full list of supported parts at www.dali-alliance.org/products

Maximum devices: While the LCMD-1000 will support up to and including the numbers of devices stated in this document (DALI output/inputs) there may be limitations, based on the available current. Please refer to iLight support for our DALI line current calculator.

DALI Device Capacity
10 ports with 6 pole GST/18 connectors. Max 30 DALI luminaires (or short addresses) distributed at will across 10 ports
In addition: 1 DALI sensor per port, 1 DALI control plate or DIU-4 per port, 1 DALI emergency luminaire per port

Typical Connection Diagram

Incoming Supply
230 volts -/+ 10%, 50/60 Hz
Mains supply protection:
Provided by installer (16A Max)

IMPORTANT NOTE: If the external luminaire requires a protective earth for safety purposes then a protective earth must be installed during the installation process by a qualified installation engineer/electrician to the local/national regulations. LCMD-1000 does not provide a protective earth.

Common Live
Earth
Neutral
Common Live
DA+
DA-

Internally Linked

Status LED
Data LED
Alarm LED

Control Data

Control: Via iLight network connection
Recommended Network Cable: iCANnet™ Network Cable
Programming: Via iLight commissioning tool

N
N
L
L

Supply

0V
CAN-L
SHIELD
CAN-H
+V

iLight Network Connection

iCANnet

4
3
COM
2
1

Switched Inputs

Input 1&2: 2 position retractive switch:
1- 'local LCM' short press = On
   and 'press and hold' = Dim up.
2- 'local LCM' short press = Off
   and 'press and hold' = Dim down.