

Installation Guide

LCMD-10

DALI-2 Lighting Control Module



iLight

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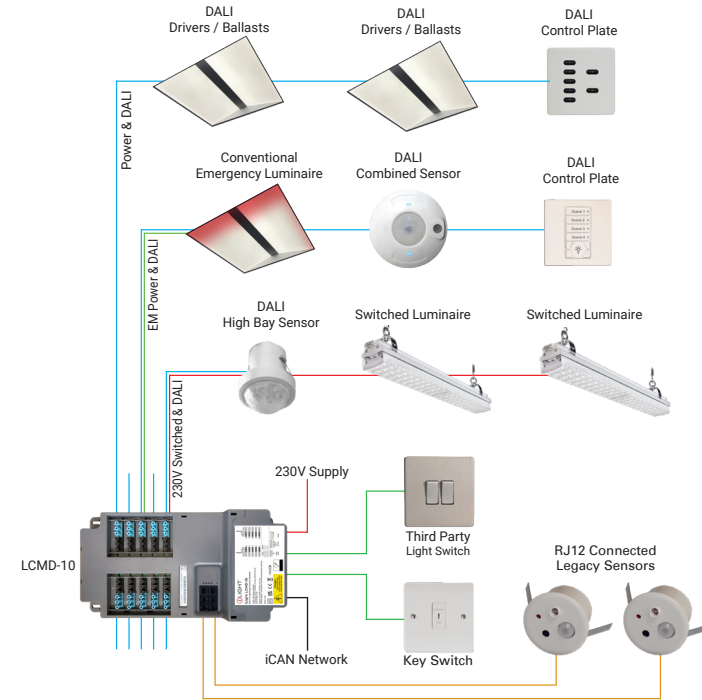
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HTC 48
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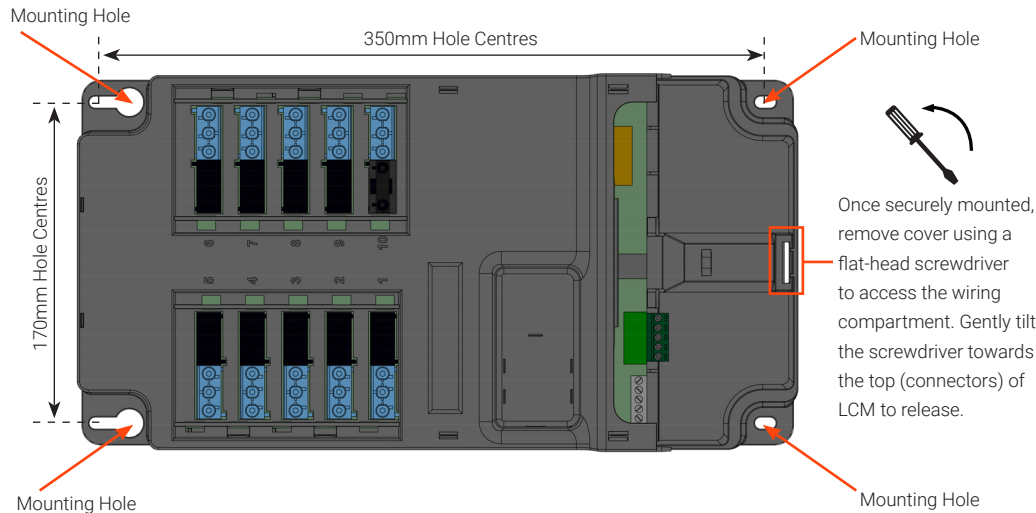


Typical Schematic



Mounting & Installation

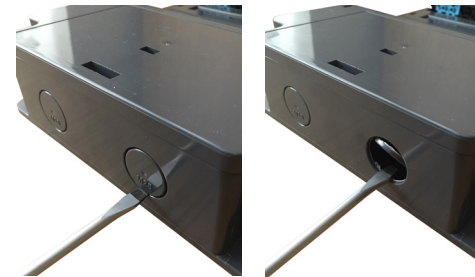
LCMD-10 must be securely mounted to a suitable surface using the 4 mounting holes provided with fixings suitable for the substrate (Maximum fixing diameter 6mm). The LCM can be mounted in any orientation to cable trays, walls and direct to a ceiling slab. All cables should be independently secured with 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.



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: +2°C to +50°C
Max storage temperature: +60°C
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: 2x1mm² or 1x 2.5mm²
Input screw terminals: 0.2mm² to 1mm²
iCANnet™ input/output screw terminals: 5 x 1mm²
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-10

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

Device Identification (IDENT)

By pressing the IDENT button

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)

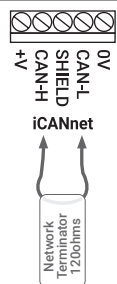
IMPORTANT NOTE: Connecting a mains potential cable to the iCAN Network terminals is likely to damage the unit and other devices connected, and invalidate warranty.

Network termination

If the LCMD-10 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



Load Data

Relay outputs: Capable of switching inductive, capacitive and resistive loads
10 x 5A relays, 230VAC +/- 10% 50-60Hz
Inrush current: TV8 Rated (20 ms - 117 A)

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-10 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

Control Data

Control: Via iLight network connection

Recommended Network Cable: iCANnet™ Network Cable

Programming: Via iLight commissioning tool

Typical Connection Diagram

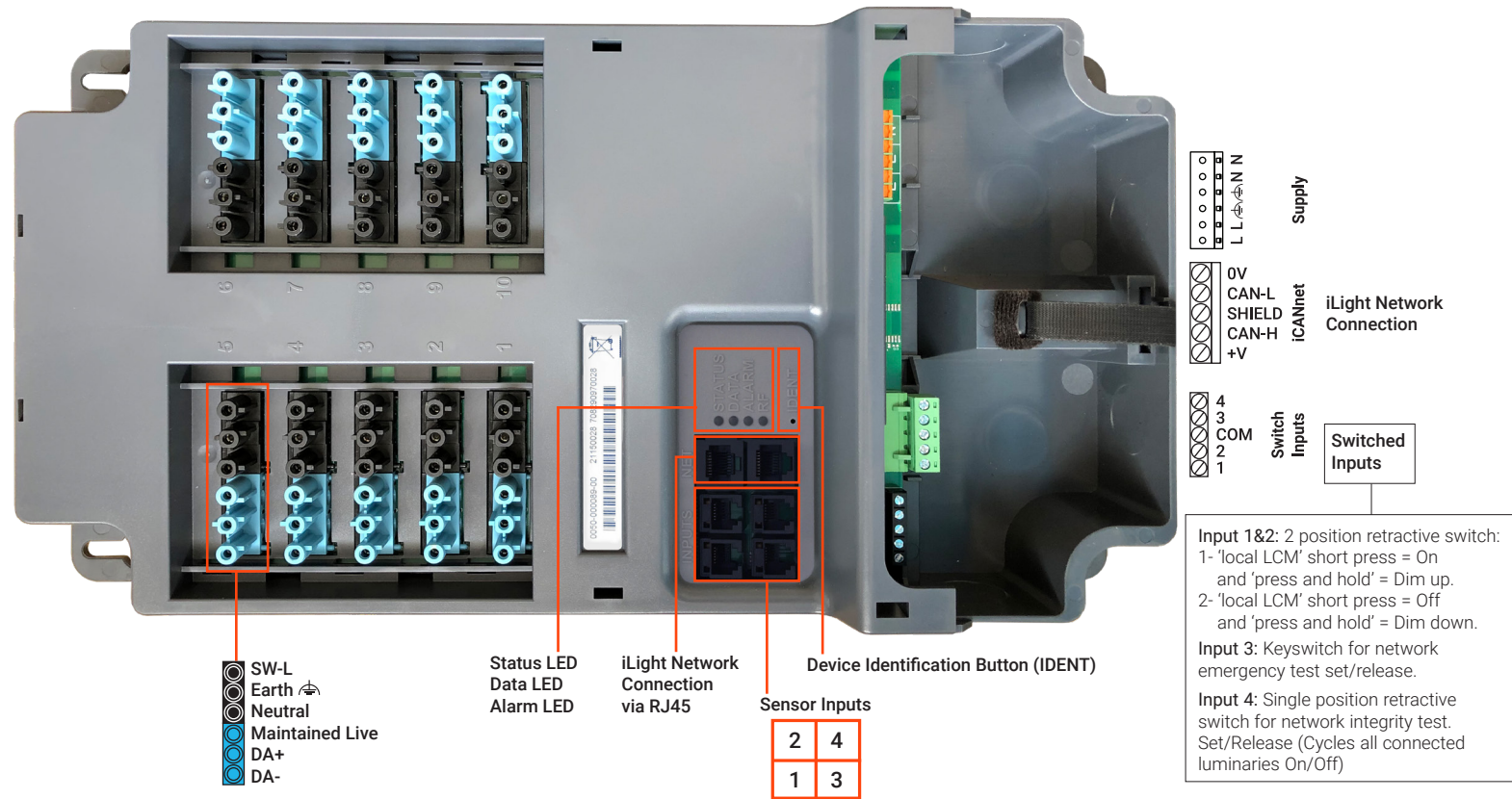
Incoming Supply

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-10 does not provide a protective earth.



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.

Input 3: Keyswitch for network emergency test set/release.

Input 4: Single position retractive switch for network integrity test. Set/Release (Cycles all connected luminaires On/Off)