

# EBR-DIN-LCM6-6AD & EBR-DIN-LCM6-6DD

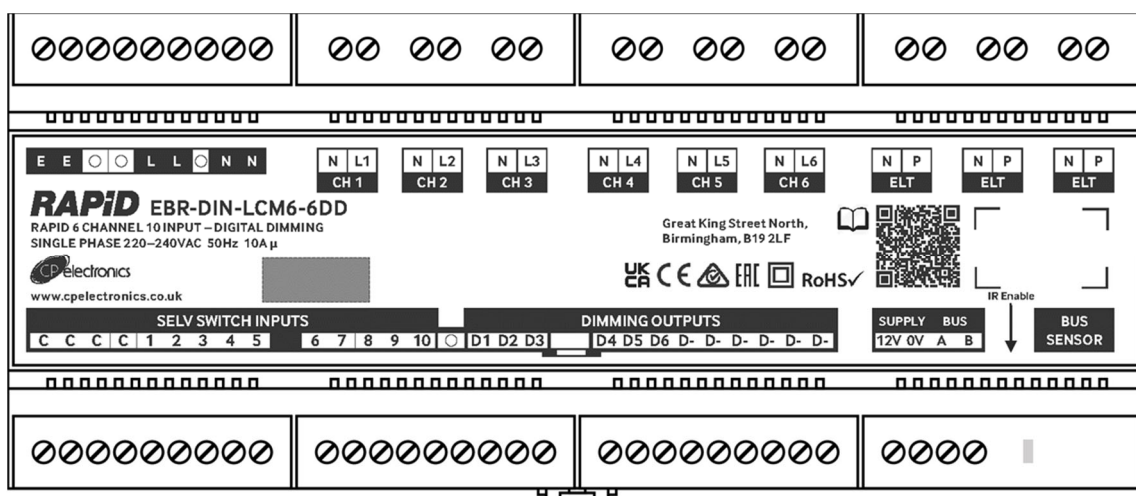
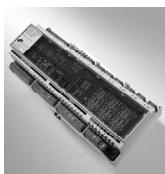
## Lighting control module

### Overview

The EBR-DIN-LCM6-6AD & EBR-DIN-LCM6-6DD series of lighting control modules (LCMs) are used as part of the Rapid lighting control system to control lighting. The Rapid DIN rail mounted LCM has 6 individually addressable outputs to allow for fully independent control of DALI/DSI (DD version), 1-10V (AD version) or switching only fittings.

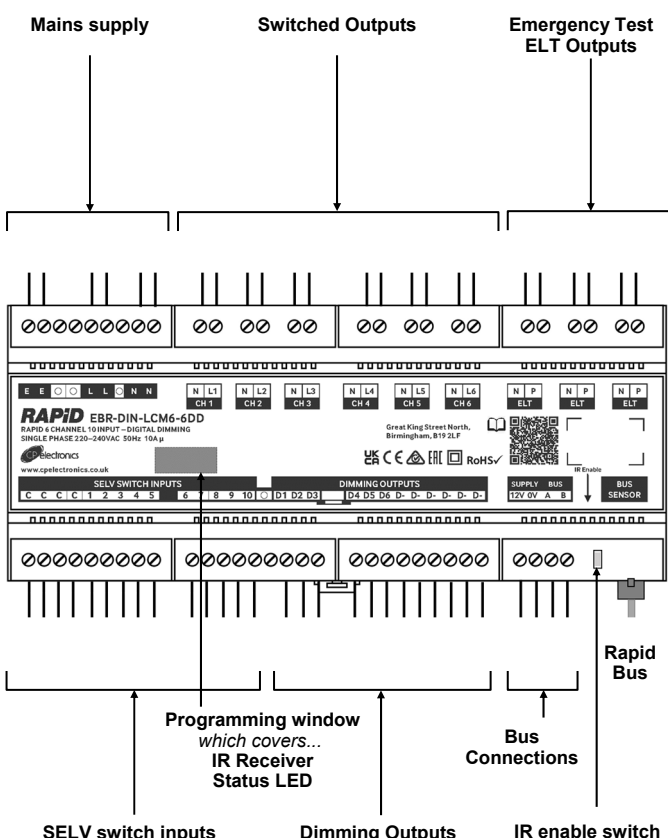
Separate relays are used for emergency testing. This LCM also has a total of 10 SELV switch inputs.

Visual of older models:



### Features

#### Front features



#### Mains connections

Live, Earth, Neutral.

#### SELV switch inputs

10 x SELV inputs

#### Emergency Light Test (ELT) outputs

3 x 6A 230VAC normally-closed contacts used for emergency lighting testing.

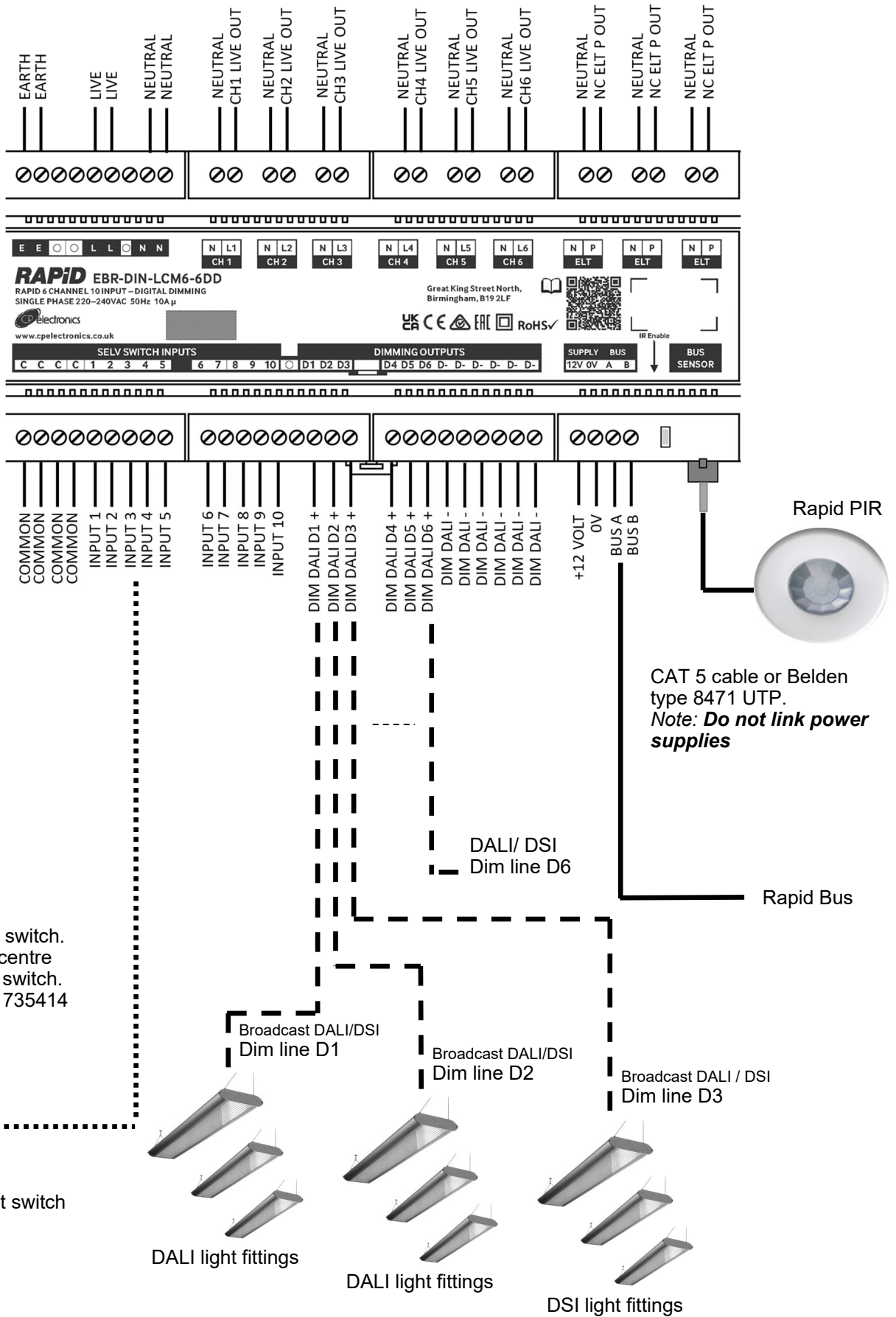
#### RJ45 ports

1 x power and Rapid network CAN port. For detectors and scene plates.

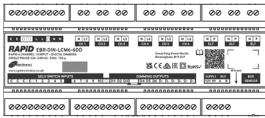
#### Removable memory feature

The removable memory feature allows settings to be easily transferred to a replacement or new LCM without the need for reprogramming.

# System wiring example



## Programming



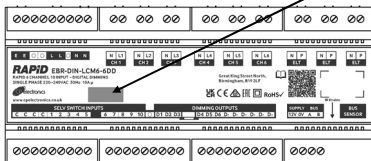
The functionality of the LCM are controlled by a number of parameters which can be changed or programmed by any of the following devices:

- **Rapid commissioning software** This is software that runs on a PC and is used to program all Rapid functions. Full details of which can be found in the Rapid System Manual
- **UNLCDHS Infrared Handset (with LCD)**. See user guide for full programming details. Point the handset at the LCM and send the required programming commands to the unit as shown below.

## Status LEDs

There are 2 status LEDs situated under the programming window. Full details of the various states of the LEDs can be found in the Rapid System Manual. Below are the main indicator functions.

Status LEDs



<b>IR message received</b>	
<b>Network activity</b>	

## Commissioning

To bring the lights on prior to commissioning, do one of the following:

- Power the boxes up without a bus controller or area controller connected. After about 15 minutes all channels will energise.
- From the user menu of the programming handset, select *override on Y*, send this to each individual box. Note that if the power is reset, this action will need to be performed again.

Commissioning will normally be performed by our trained commissioning engineers.

Please note that prior to commissioning, it is the responsibility of the installing contractor to ensure the following:

- The units must be connected and installed as described overleaf
- Mains power must be available
- Luminaires must be connected
- Bus connection must be established and checked

The LCM can be set up using our infrared programming handset or computer front end. To take advantage of these, kindly contact CP Electronics for training opportunities and relevant programming documentation.

## Inrush current

Based on testing using Tridonic LCAI 10W 150mA-400mA ECO C LED driver (Tridonic Article Number 28000130). Up to a maximum of 80A of Inrush current per output channel for no more than 10 mS.

The following **maximum** number of LED drivers can be connected to EBR-DIN-LCM6-6DD and AD versions. Alternative LED drivers may have larger inrush and will need to be de-rated accordingly. Check with the luminaire manufacturer. **CP Electronics accept no responsibility for checking and applying suitable de-rating factors for LED loads.**

**Please note the following applies when feeding the LED drivers/ ballasts via the relays in the LCM.**

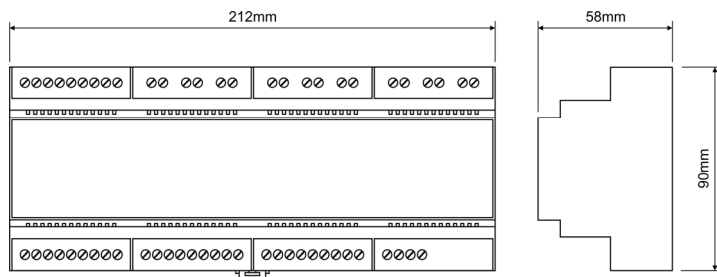
- No more than 40 LED drivers per LCM distributed over 6 channels.
- No more than 20 drivers per output channel.

**Please note the following applies WHEN THE LED DRIVERS ARE FED DIRECTLY FROM THE MCB AND THE DALI PAIR ONLY ARE VIA THE LCM. This would mean switching and dimming control is via the DALI pair.**

- Based on LED DALI driver consumption being 2mA no more than 200mA per LCM.
- Max no of LED drivers/ ballasts 50 per channel
- Maximum DALI cable run to be 300m per LCM using 1.5mm UTP (mains rated unscreened twisted pair)

## Technical data

Dimensions	See diagram opposite
Weight	0.50kg
Supply Voltage	220-240VAC
Frequency	50Hz
Relay rating	Switched live 10A ELT normally-closed 6A
Terminal Capacity	4mm <sup>2</sup>
Load per LCM	10A
Load per channel	6A fluorescent and incandescent lighting 3A compact fluorescent lighting 3A low energy lighting 3A low voltage lighting (switch primary of transformer) 3A fans and ventilation equipment Switch SON lighting loads via a contactor
Dimming	Maximum 20 drivers per channel (current limit 50mA per channel). Maximum 200mA per LCM. (see page 3 for switching inrush). Cable lengths for dimming outputs: 100m using 0.5mm <sup>2</sup> wire 150m using 1.00mm <sup>2</sup> wire 300m using 1.5mm <sup>2</sup> wire
SELV	There are 3 isolated circuits supplied from an isolating safety transformer. <ul style="list-style-type: none"> <li>• SELV rated Logic power (relay drive, microcontroller, CAN bus) has a nominal and maximum voltage of 13V.</li> <li>• SELV inputs have a nominal voltage of 12 V and a maximum of 19V.</li> <li>• The non-SELV circuitry of the Dimming outputs is 16V nominal and 22.5V maximum</li> </ul>
Temperature	-10°C to 35°C
Humidity	5 to 95% non-condensing
Material (casing)	Flame retardant PC/ABS



### Classifications

Insulation	Class II
Purpose	Automatic control
Construction	Independently mounted control for surface mounting
Ball pressure test	Insulating material retaining current carrying parts tested at 125°C, all other insulating materials tested at 75°C.
Type of action	Type 1.B action micro disconnection
Overvoltage	Category III
Software class	Class A
Pollution	Degree 2

### Compliance

For further compliance information visit [www.cpelectronics.co.uk](http://www.cpelectronics.co.uk)



## Part numbers

<b>LCM</b>	EBR-DIN-LCM6-6DD	Rapid 6 channel DIN rail LCM DALI / DSI dimming single phase
	EBR-DIN-LCM6-6AD	Rapid 6 channel DIN rail LCM 1-10V dimming single phase
<b>Accessories</b>	UNLCDHS	Universal LCD programming handset
	EBR-BT	Bus terminator

### IMPORTANT NOTICE!

This device should be installed by a qualified electrician in accordance with the latest edition of the IEE Wiring Regulations and any applicable Building Regulations.



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OHS 642036

Due to our policy of continual product improvement CP Electronics reserves the right to alter the specification of this product without prior notice.

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