# Lighting Control Module (LCM)



LCMs bring together the energy saving functionality of daylight linking where natural daylight is balanced with artificial lighting. The units are simple to install and can be re-programmed as and when your needs may change in the future. The system can be used to control all types of lighting – fluorescent, low voltage and mains voltage and is the perfect solution for the connection of luminaries to either presence, absence or conventional switches with the added feature of daylight linked dimming and SELV switching.

### Canis Circuit Distribution Box

### Features

- Two linked channels
- Manual Switching, Presence or Absence Detection
- DSI or Broadcast DALI
- Can be used with dimmable and nondimmable lights via the LCMs integral relays
- Daylight Linked and manual Dimming available

- Dim down before switch off feature
- Flexible SELV Switching
- 8 luminaire outputs
- Built in emergency test facility
- No commissioning required all LCMs are factory pre-programmed
- Strong Steel Casing
- 100% factory tested



Each CANIS unit is a 6 Pole Two Channel SELV Switching Module utilising SELV wall switches and/or SELV Combined Presence and Daylight Sensors to control the lights.

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#### Technical Data

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- All LCMs require a 4 core feed to operate correctly
  - Each LCM has two 4 Pole, two 6 Pole and two RJ45 ports assigned as follows:
    - \* 1x 4 Pole Unswitched in for the power in feed
    - \* 1x 4 Pole Unswitched out to enable other modules to be connected to the same circuit
    - \* 1x RJ45 SELV Switch port for a SELV wall switch
    - \* 1x RJ45 SELV Switch port for a SELV PIR
    - \* 8 x 6 Pole luminaire outputs (4 for channel 1, 4 for channel 2)
- Multiple SELV switch points and/or PIRs can be added with the use of additional RJ45 leads and/or RJ45 3 way splitters
- Multiple switches can be installed with the use of the same RJ45 SELV wall switch drop lead
- DSI LCMs are designed to operate luminaires with Tridonic DSI ballasts and standard non-dimmable HF ballasts all non-dimmable ballasts will switch on/off via the LCM's integral relays
- DALI LCMs are designed to operate luminaires with DALI ballasts and standard non-dimmable HF ballasts – all non-dimmable ballasts will switch on/off via the LCM's integral relays
- All LCMs are designed to control up to 20 ballasts per channel
- If used the master wall switch must be a 2-way centre off momentary push to make rocker type switch. This switch is used to manually dim the luminaires – pressing and holding the top of the switch will increase the output of the lights, pressing and holding the bottom of the switch will decrease the output of the lights. With absence LCMs this switch is used to turn the LCM on
- If used the channel switches must be momentary push to make type switches
- Emergency testing facility built in via a SELV wall switch (if required)

Conformity:	Directive EMC 89/336/EEC Directive IVD 2006/95/EC	IP Rating:	IP2X
	Unit independently tested to comply with the requirements of: BS EN 60669-2-1:2004	Connection via locking/latching requirements of	Wieland GST 18i 4 pole female, male type, complying with the BS EN 61535 : 2009
	BS EN 60669-2-3:1999 BS EN 55015:2006 BS EN 61000 series of	Operating temp -5°C to 35°C	eratures
	standards for EMC compatibility	All CANIS uni a galvanised n	t casings are manufactured from naterial equal to DX51D G275 in
Supply voltage: Current Rating: Relay Rating:	230 Volts AC +10%/-6% 50Hz 16Amp 16A resistive and incandescent 6A fluorescent	accordance wi mounting flang- installation with	th BS EN 10142:2000. External es are fitted to allow quick and easy in the ceiling void.
RJ45 Wiring:	3A Compact fluorescent 3A Low Energy 3A Ventilation Fans T568B CAT 5. 5/12vDC SELV	All CANIS units traceability all date of testing of which are a	are 100% factory tested. To ensure CANIS units are labelled with the and a unique serial number both lso recorded electronically.

Code	Description
	CANIS Range - 8 Port 2 Channel DSI Dimming LCMs
P692070000.0	LCM P1 (DSI)
P692071000.0	LCM A2 (DSI)
P692072000.0	LCM W2 (DSI)
	CANIS Range - 8 Port 2 Channel DALI Dimming LCMs
P692075000.0	LCM P1 (DALI)
P692076000.0	LCM A2 (DALI)
P692077000.0	LCM W2 (DALI)

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### CANIS Types and available standard switching configurations

### **Manual Switching**

Switching options available are:

• Manually Switched via a SELV Wall Switch. Manual dimming is available

Separate switches can be installed to enable the switching of each of the two channels; this could for example be used to allow the separate switching of the teaching wall lights in a classroom.

Manual dimming is available via the master wall switch.

### **Presence Detection**

Switching options available are:

- Presence Detection via a SELV PIR with Daylight Linked Dimming (all lights)
- Presence Detection as above with the addition of SELV Wall switches to control each Channel and/or Manual Dimming for all channels together

An override on facility is built in to this module (operated via a SELV Wall Switch) which will hold all linked channels on together until released.

Separate switches can be installed to enable the switching of each of the three channels; this could for example be used to allow the separate switching of the teaching wall lights in a classroom.

Manual dimming is available via the master wall switch.

Additionally a 10% dim down before switch off facility is built in to warn the occupants of a room that the lights are about to switch off (reactivation by triggering the sensor).

### Absence Detection

Switching options available are:

- Absence Detection via a SELV Wall Switch and a SELV PIR. Manual dimming is available
- Absence Detection with Daylight Linked Dimming (window row(s) lights only)

Separate switches can be installed to enable the switching of each of the three channels; this could for example be used to allow the separate switching of the teaching wall lights in a classroom.

Manual dimming is available via the master wall switch which is used to switch the LCM on and off.

Additionally a 10% dim down before switch off facility is built in to warn the occupants of a room that the lights are about to switch off (reactivation by triggering the sensor or by the SELV wall switch if the lights have been switched off).









