

Installation Guide

SCMH0410-G2

8 channel controller - 4 volt free 10A switched outputs & 4 channels of 0/1-10v or broadcast DALI



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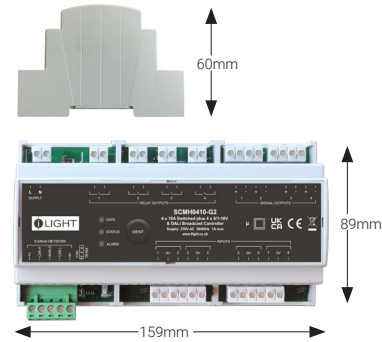
EU Authorised Representative
Cooper Lighting Netherlands B.V.
High Tech Campus
HTC 48
Eindhoven
5656 AE

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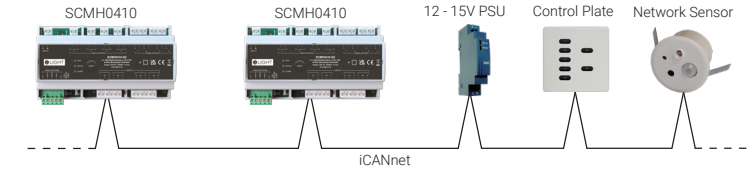
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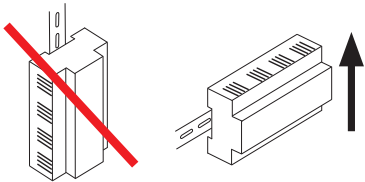
Dimensions



Typical Schematic



Mounting & Installation

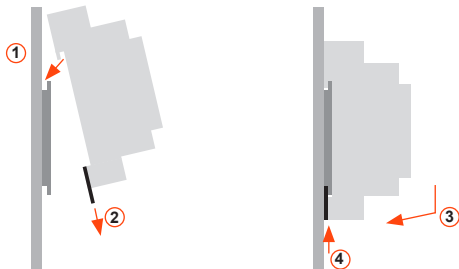


SCMH0410-G2 must be mounted in a suitable enclosure to provide regulatory protection from electric shock hazard as well as protecting the iCANnet data network from tampering that could lead to reduced network security.

Ensure selected enclosure provides adequate cooling ventilation.

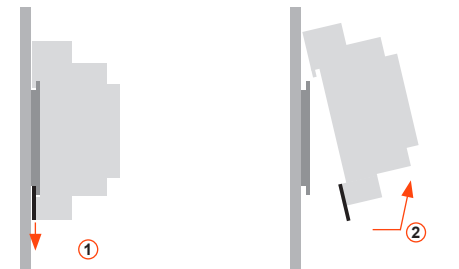
Fixing to DIN rail

1. Fix top clips over DIN rail.
2. Pull down bottom clip using screwdriver.
3. Close module towards DIN rail.
4. Push up bottom clip to fix securely to DIN rail.



Removing from DIN rail

1. Pull down bottom clip with screwdriver.
2. Lift module away from DIN rail.



Technical Data

Electrical & Mechanical

Supply: 230 volts +/- 10%, 50/60 Hz 1A Max
Maximum load: 40 Amp @ 50°C
Maximum switching channel current: 10 Amp
Load Protection: Provided by installer
Control Supply from iCANnet: 10mA
(Device does not supply current to iCANnet)
Terminal Sizes (Capacity per terminal):
Supply/relay/signal screw terminals: 2x1mm² or 1x 2.5mm²
or 1x 4mm²
Input screw terminals: 0.2mm² to 1mm²
Terminal Torque Setting: 0.5Nm
iCANnet™ input/output screw terminals: 5 x 1mm²
Input Cable Length: 30m MAX
Installation: Installation must be carried out by a suitably qualified electrician.

Load Data

Load types: This unit is designed to work with most lighting load types. Please consult with the iLight help desk for guidance on true load calculations. Care should be taken when specifying discharge lighting sources with power factor capacitors.
4 x 10A relays, 120 - 250V AC +/-10%, 50/60 Hz, Volt free
DC switching - Max 24V DC - 10A
DALI (Broadcast) - Source, 50 mA per channel 15VDC
40 Ballasts/50mA per channel MAX
0/1-10V source/sink, 30 mA per channel

Control Data

Control: Via iLight network connection
Recommended Network Cable: iCANnet™ Network Cable
Programming: Via Device Editor software

Mechanical Data

Weight: 0.35 kg
Operating temperature: +2°C to +50°C
Relative humidity: 5% - 95% max, non-condensing
IP rating: IP2X

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Ident Switch and LEDs

Normal Running Mode

Green STATUS LED flashes – device OK
Red DATA LED flashes when messages sent on network.

Device Identification

Press and release IDENT button.
Sends a message to identify the device on the network (Red LED flashes).

Configuring Override Mode - Manual Output Configuration

Should the installer need to test the connected loads prior to software commissioning the unit can be configured as follows:

Press and hold the IDENT button while applying power to the unit.
Release the IDENT button after at least 5 seconds

The DATA, STATUS and ALARM LEDs will illuminate for 1 second. Thereafter, the Red DATA LED will then flash twice every second.

Insert or remove a link between Input 7 & 0V and/or Input 8 & 0V

Input 7 – Sets the output mode

- No Link = 0/1-10V = Green STATUS LED extinguished
- Link = DALI Broadcast = Green STATUS LED illuminated

Input 8 – Sets the channel behaviour

- No Link = Channels linked = Red ALARM LED extinguished (Relay 1 & Signal 1, Relay 2 & Signal 2 etc)
- Link = Channels are individually controlled = Red ALARM LED illuminated (Relays 1-4 then Signal 1-4)

Examples

		Link 7	Link 8
Status	0/1-10V Mode	No	No
Alarm	Relay and Signal Outputs = Linked	No	No
Status	0/1-10V Mode	No	Yes
Alarm	Relay and Signal Outputs = NOT Linked	Yes	No
Status	DALI Broadcast Mode	Yes	No
Alarm	Relay and Signal Outputs = Linked	Yes	Yes
Status	DALI Broadcast Mode	Yes	Yes
Alarm	Relay and Signal Outputs = NOT Linked	Yes	Yes

When the correct programming state is achieved, a long press of the IDENT button will causes all LEDs to flash 3 times to show override mode has been committed to memory. After which the unit will restart and return to normal operation and the links can be removed.

Using Override Mode

Press and hold the IDENT button for at least 10 seconds, the unit will enter override mode and all outputs dim to 100%.

When in Override mode the Red DATA LED will flash rapidly. The Green STATUS LED and the Red ALARM LED will indicate the manual output configuration - See 'Configuring Override Mode'

The outputs are then controlled as follows:

- 1st Short press -> all outputs dim to 0%
- 2nd Short press -> only channels 1+5 to 100%
- 3rd Short press -> only channels 2+6 to 100%
- 4th Short press -> only channels 3+7 to 100%
- 5th Short press -> only channels 4+8 to 100%
- 6th Short press -> all outputs dim to 100%

These actions repeat sequentially.

**When operating as 8 independent channels, each short press will activate a single channel.*

Exiting Override Mode

To exit (at any point) press and hold ident switch for at least 10 seconds or cycle power. Green LED flashes.

Fault Indication

Over Temperature or Short Circuit = Red ALARM/
Green STATUS (Rapid flash).

Signal Output LEDs:

0/1-10V = Output level proportional to LED brightness.
DALI Broadcast = On with DALI data indication.

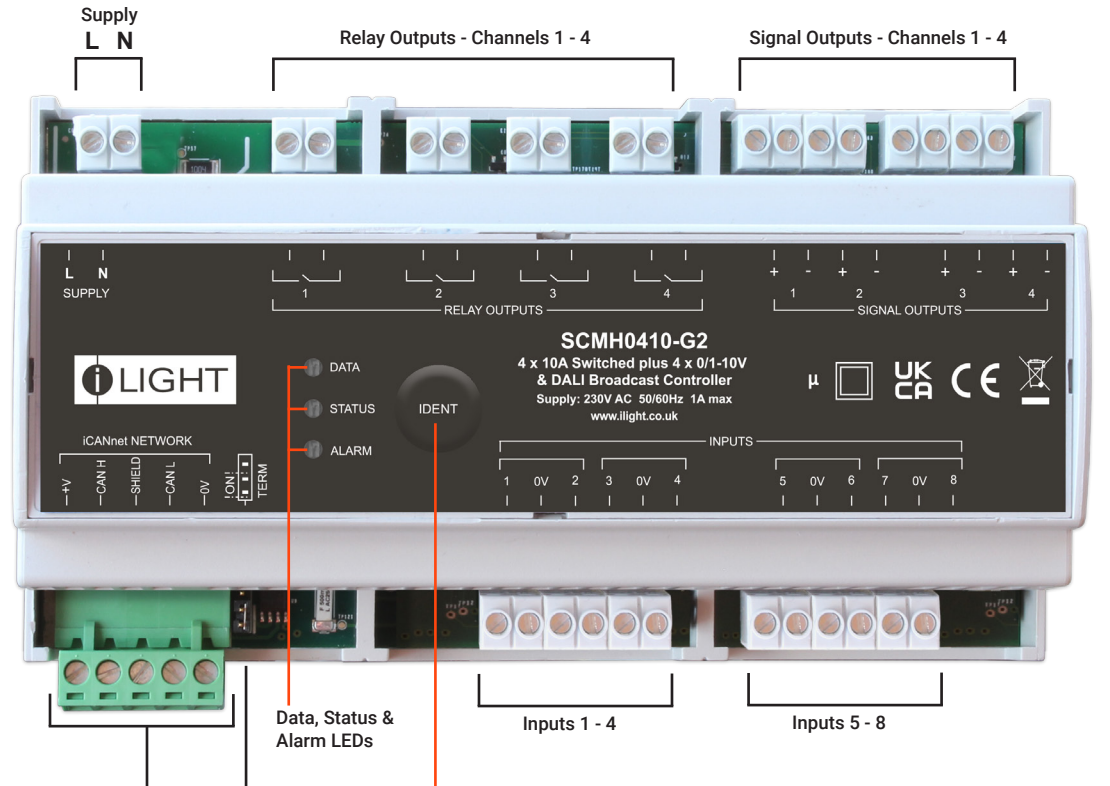
Relay Output LEDs:

On/Off = Output state.

Typical Connection Diagram

Incoming Supply: 230 volts +/- 10%, 50/60 Hz

Mains supply protection: Provided by installer



Connection to the iLight Network

iLight Network Termination*

Device Identification Button

* This unit does not output +V to the iCAN network. Requires 10mA @ 15V DC either via pre-powered iCAN network or from external PSU

iCANnet Network termination

SCMH0410-G2 is supplied with termination disabled as standard. If it is connected as an end device on the iCAN network, the jumper will need to be moved to enable termination.

To enable termination, move the jumper from the inner two pins to the outer two pins.



iLight Network Connections

Function	iCANnet Cable Colours
0V	Black
CAN L	Blue
Shield	Silver
CAN H	White
+VDC	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 (12-18V)
Nominal operating current: 10mA