

# Installation Guide

## iLight

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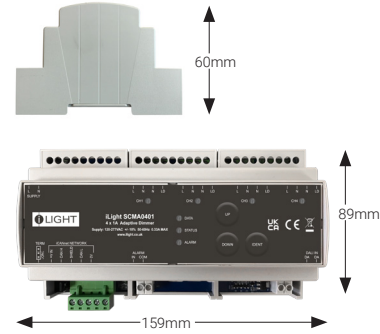


## iLight SCMA0401

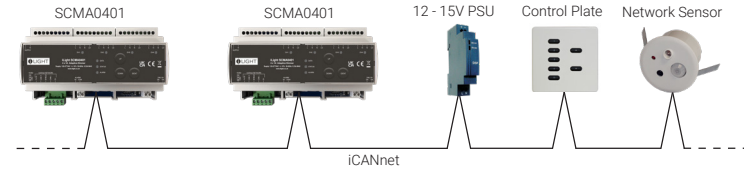
4 Channel x 1A Adaptive Dimmer  
DIN rail Mount



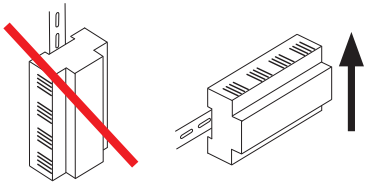
## Dimensions



## Typical Schematic



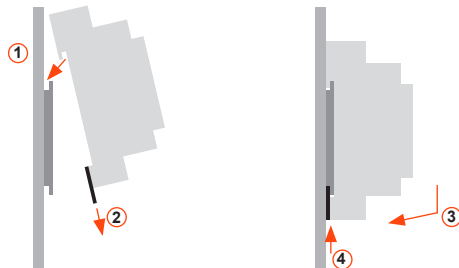
## Mounting & Installation



SCMA0401 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 so the device and its direct surrounding does not exceed 50°C max temperature. iLight recommend using EN1-14 or EN3-42 DINrail enclosures.

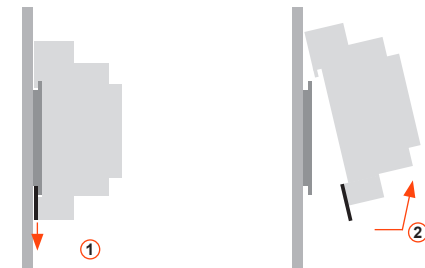
### Fixing to DIN rail

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 Data

Mains supply: 120 – 277V AC +/-10%, 50/60 Hz  
Unit rating: Maximum 4A single phase\*\*  
Mains supply protection: Provided by installer (6A Type C MCB recommended)  
Max Output channel current: 4 x 1A RMS or 2 x 2A RMS when channel pairing is used. No minimum load  
Note: Pairing combinations allowed (1+2) and/or (3+4) only  
CAN power consumption: 85mA  
Mains terminals: Maximum cable size 1 x 2.5mm<sup>2</sup>  
Channel terminals: Maximum cable size 1 x 2.5mm<sup>2</sup> or 2 x 1.5mm<sup>2</sup>

### Mechanical Data

Dimensions: 159mm (w) x 89mm (h) x 60mm (d) (6.26" x 3.5" x 2.36")  
Housing: DIN rail case; 9 module width  
Weight: 0.2kg (0.44lb)  
IP rating: IP20

### Operating Conditions

Operating temperature: +2°C to 50°C  
Relative humidity: 5% to 95% non-condensing  
Max Storage Temperature: +60°C

### Software

For programming SCMA0401, Device Editor v31.4.40 or later is required

# SCMA0401

4 Channel x 1A Adaptive Dimmer - DINrail Mount

## Device LEDs and Buttons

### Status LED

Green LED flashes – device OK  
Green LED flashes rapidly - device under DALI control

### 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

Press and release switch.  
Sending a message to identify the device on the network (red Data LED flashes)

### Channel Output Status LEDs

LEDs turn on when the channel is > 0%  
LEDs turn off when the channel is 0%

### Manual Control of Channel Outputs

By holding the IDENT button down for 5 seconds, manual control of each channel is enabled using the UP and DOWN buttons.

A short press of the UP button will raise the output level by 10% on each press. A long press (>1s) of the UP button will set the output level to 100%. The same operation is true for the DOWN but in reverse.

Press the IDENT button to change the output channel being controlled. To exit manual control hold the IDENT button down for 5 seconds.

## iCAN 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

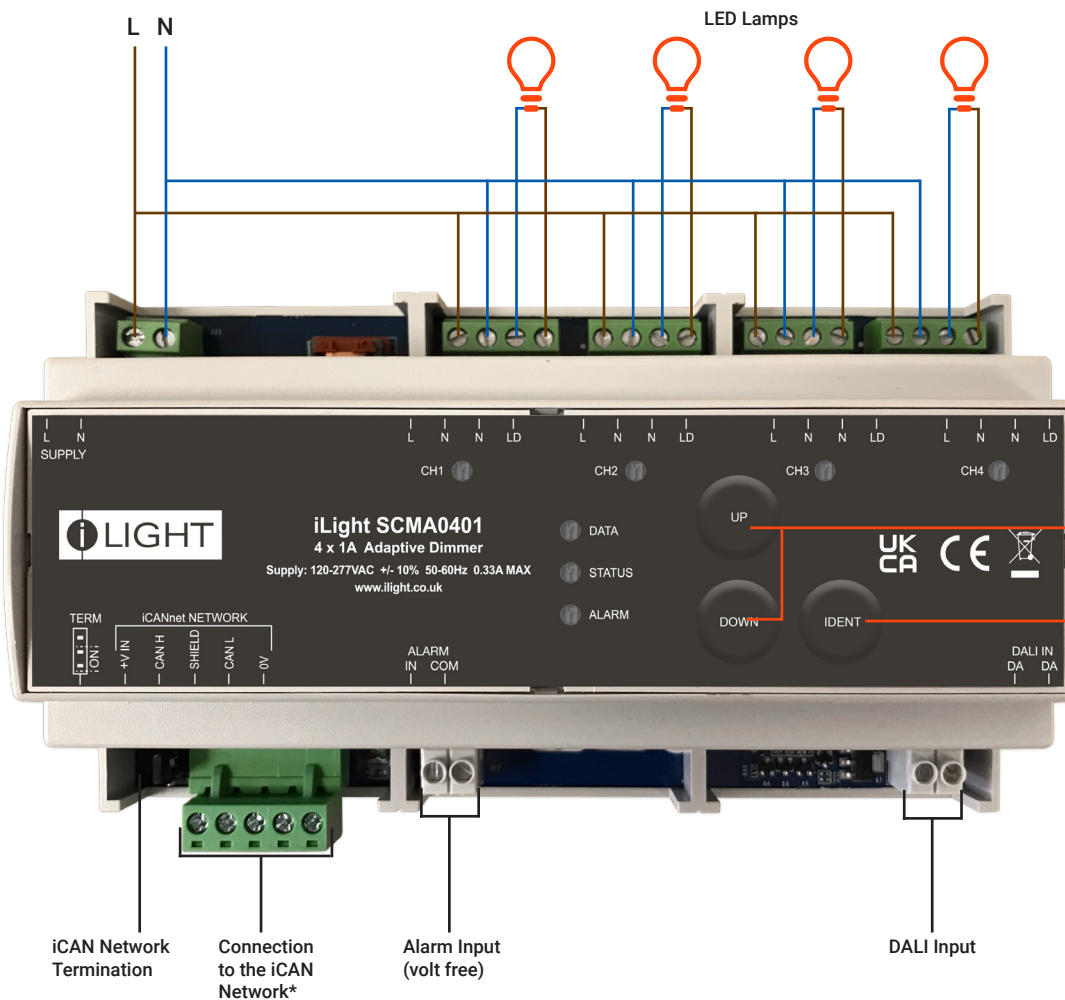
Nominal operating voltage: 15V (12-18V)  
Nominal operating current: 85mA

## Typical Connection Diagram

### Incoming Supply

120 - 277V AC

Mains supply protection:  
Provided by installer (6A Type C MCB recommended)



iCAN Network Termination

Connection to the iCAN Network\*

Alarm Input (volt free)

DALI Input

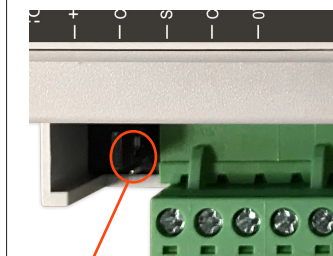
\* This unit does not output +V to the iCAN network. Requires 85mA @ 15V DC either via pre-powered iCAN network or from external PSU

**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

SCMA0401 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 outwards from the inner two pins to the outer two pins.



Termination ON

Termination OFF

Manual Control Buttons

Device Identification Button

**\*\*Note:** There are no industry standards for mains dimmable LED designs. Individual lamp performance and dimming ranges vary considerably between manufacturers, models and even over time. Always refer to the lamp manufacturer's recommended limits for leading/trailing edge operation, de-rating of load and maximum number of lamps per circuit. This is often limited to less than 10 lamps per circuit regardless of load. In all circumstances it shall be the responsibility of the installer to check lamp compatibility in advance or arrange proving tests/quantities as necessary.