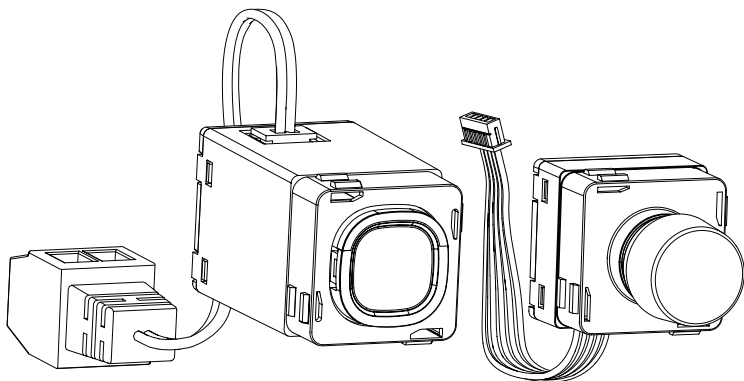


## DALI Switch Mechanisms

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### DCDAL31 Series Installation Instructions



DCDAL31M - Master

DCDAL31S - Slave

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## Contents

1.0	Description.....	3
1.1	Product Range.....	3
1.2	DCDAL31 Switch Mechanisms.....	3
1.3	Safety Information.....	3
2.0	Installation Requirements.....	4
2.1	DCDAL31MOD Coverage Pattern.....	4
2.2	DCDAL31MPE Optimised Placement.....	4
2.3	Location and Restrictions.....	5
2.4	Power Requirements.....	5
2.5	DALI Power.....	5
2.6	DALI Wiring Diagram.....	6
3.0	Assembly and Installation.....	6
3.1	Installing the Button Covers.....	6
3.2	Installing the Mechanism on the Grid Plate.....	7
3.3	Connecting the DALI Line Cable.....	7
4.0	Specifications.....	8
5.0	Dimensions.....	9
5.1	Master Switch.....	9
5.2	Slave Switch.....	9
6.0	Standards Complied.....	10
7.0	Warranty and Support.....	11
7.1	Warranty Statement.....	11
7.2	Technical and Sales Support.....	12

## 1.0 Description

### 1.1 Product Range


Catalogue Number	Description
DCDAL31M	DALI 30 Mechanism
DCDAL31M2PB	DALI 30 Mech master switch
DCDAL31MSEG	DALI 30 Mech master display
DCDAL31MOD	DALI 30 Mech master occupancy
DCDAL31MPE	DALI 30 Mech master light level
DCDAL31MIR	DALI 30 Mech master switch IR
DCDAL31MTEMP	DALI 30 Mech master temp
DCDAL31SPB	DALI 30 Mech slave switch PB
DCDAL31SROT	DALI 30 Mech slave rotary
DCDAL31SPBUD	DALI 30 Mech slave switch up/down
DCDAL31SROKUD	DALI 30 Mech slave switch rocker

The DALIcontrol commissioning wizard DCCOM/1 is used to program DCDAL31 devices and is available from DALIcontrol. Using software not provided by DALIcontrol may void any warranties applicable to the hardware.

### 1.2 DCDAL31 Switch Mechanisms

The DCDAL31 switch mechanism is a DALI input device that is assigned a unique unit address on a DALI line and operates as a DALI master device capable of controlling multiple DALI slave devices connected to that line.

### 1.3 Safety Information

 Warning	Never connect the DCDAL31 mechanism to mains power. Do not open the DCDAL31 mechanism. No user serviceable parts inside.
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## 2.0 Installation Requirements

### 2.1 DCDAL31MOD Coverage Pattern

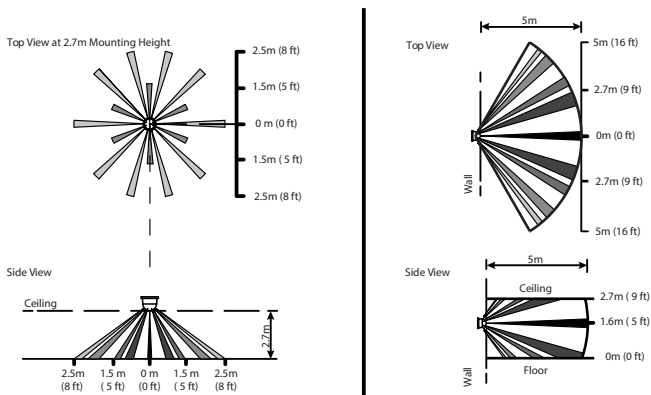


Figure 1: DCDAL31MOD - Coverage Pattern at 25°C

### 2.2 DCDAL31MPE Optimised Placement

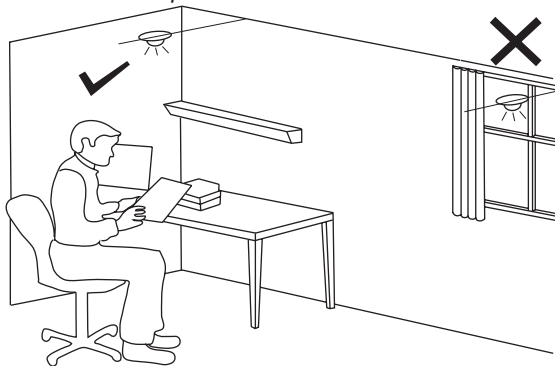


Figure 2: DCDAL31MPE - Optimised Placement

## 2.3 Location and Restrictions

It is important to select the right location to install the DCDAL31 mechanisms. Some considerations are listed below:

- DCDAL31 devices are designed to mount in Clipsal 30 Series aperture grid plates and enclosures.
- Units are designed for indoor use only, unless installed in an appropriate IP rated enclosure.
- Provide easy access to the unit for switching lights and selecting scenes.
- Choose a location free of water, humidity and direct sunlight.
- Allow adequate ventilation.
- Units may be mounted vertically or horizontally.

## 2.4 Power Requirements

Power Requirements		
Catalogue Number	DALI Line Current	Avg Power @ 16V
DCDAL31M	4.5mA	56mw
DCDAL31M2PB	8.5mA	104mw
DCDAL31MOD	4.5mA	56mw
DCDAL31MPE	4.5mA	56mw
DCDAL31MSEG	15mA	160mw
DCDAL31MIR	8.5mA	160mw
DCDAL31MTEMP	4.5mA	56mw
DCDAL31SPB	Powered by DCDAL31M2PB	
DCADL31SROT	Powered by DCDAL31M2PB	
DCDAL31SPBUD	Powered by DCDAL31M2PB	
DCDAL31SROKUD	Powered by DCDAL31M2PB	

## 2.5 DALI Power

A DCDAL31 mechanism draws power from the DALI line. An Installer needs to ensure the maximum DALI line current is not exceeded by using the table found in Section 4.0.

## 2.6 DALI Wiring Diagram

It is the responsibility of the installer to ensure that the mechanism is wired to conform to the DALI wiring standards and meet local electrical and building codes.

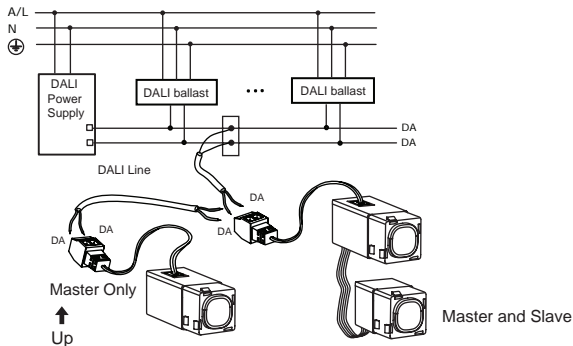


Figure 3: DALI Wiring Diagram

## 3.0 Assembly and Installation

### 3.1 Installing the Button Covers

Install the labels before installing DCDAL31 mechanisms in the grid plate.

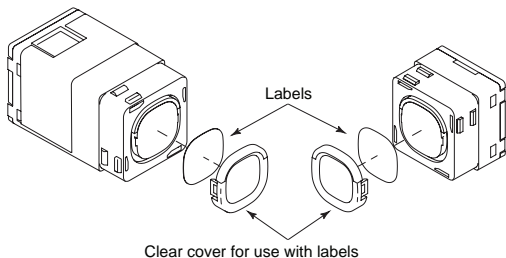


Figure 4: Installing the label and cover

### 3.2 Installing the Mechanisms on the Grid Plate

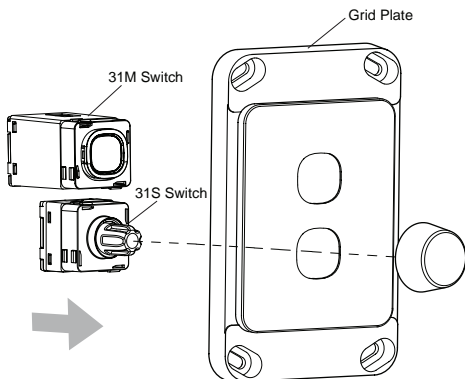


Figure 5: Installing the DCDAL31 mechanism on the grid plate

### 3.3 Connecting the DALI Line Cable

A cable is supplied to connect the DCDAL31 mechanism to the DALI line cable. The DALI terminals are both marked with 'DA' and are not polarity sensitive.

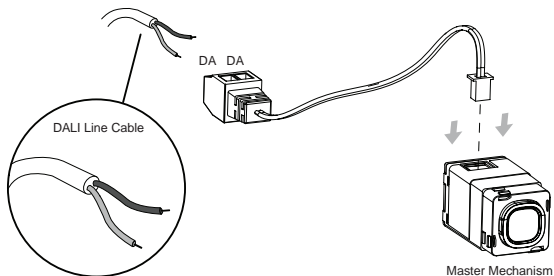


Figure 6: Connecting the DALI line cable

The DALI line cable must be a mains rated cable which is no greater than  $2.5\text{mm}^2$ . Expose the conductor no more than 6mm and insert into the screw terminal. Using a small blade screw driver carefully tighten the terminal until the cables are firmly held in position with no copper exposed.

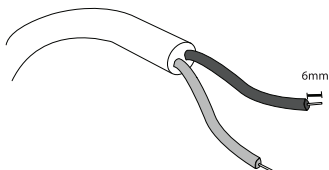


Figure 7: DALI line cable

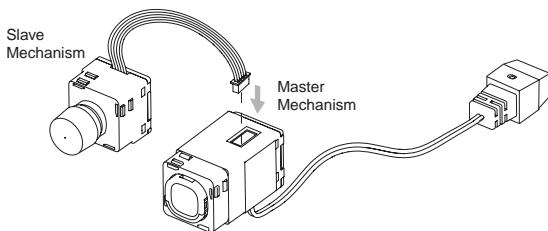


Figure 8: Connecting Slave switch to Master switch

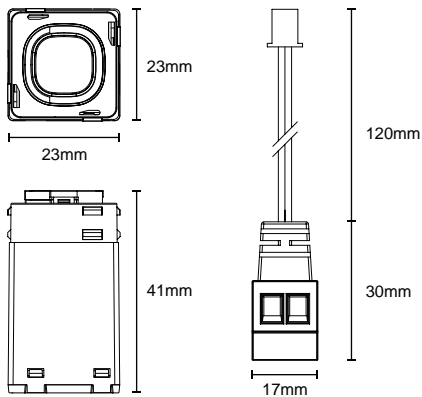
## 4.0 Specifications

Parameter	Description
DALI Supply Voltage	9.5 to 22.5V DC (Typical 16V DC)
Max Abnormal Voltage	240VAC
Maximum Number of Units per Network	20
Control Functions	DALI control
DALI Connection	Screw terminal for $2.5\text{mm}^2$ cable.
Operating Temperature	0 to 50°C
Operating Humidity Range	10 to 95% RH

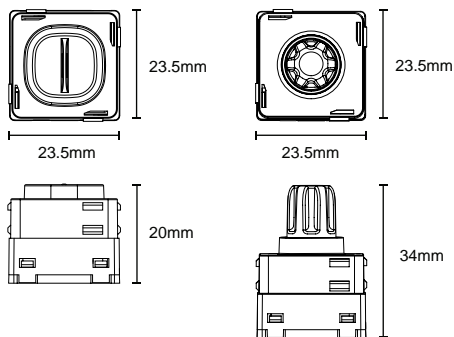


## 5.0 Dimensions

### 5.1 Master Switch





### 5.2 Slave Switch



## 6.0 Standards Complied

The DCDAL31 switch mechanisms comply with the following standards:

European Council	Standard	Title
 European Committee for Standardisation	EN 61347-2-11	Lamp control gear. Particular requirements for miscellaneous electronic circuits used with luminaires
	EN 61547	RFI Emissions Standard Specification for equipment for general lighting purposes. EMC immunity requirements RFI Emissions Standard
	EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
	2011/65/EU	The Restriction of the Use of Certain Hazardous Substances (RoHS) in Electrical and Electronic Equipment (EEE) Directive
	2012/19/EU	Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)
 RCM	AS/NZS 61347-2-11	Particular requirements for miscellaneous electronic circuits used with luminaires
	AS/NZS CISPR15	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

## **7.0 Warranty and Support**

### *7.1 Warranty Statement*

Schneider Electric (Australia) Pty Ltd, (Clipsal by Schneider Electric), warrants this product to be free from defects in materials and workmanship for a period of twenty (20) months from the date of installation or twenty-four (24) months from the date of purchase of this product, whichever is the earliest. The benefits conferred herein are in addition to any other rights and remedies you may have at law in respect to this product. Australian and New Zealand customers please see the notes below.

Australian Consumer Law specifies that our goods come with guarantees that cannot be excluded. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

New Zealand. This guarantee is in addition to and does not affect your rights under applicable law, except where that law expressly provides otherwise. The Consumer Guarantee Act 1993(NZ) will not apply if this product is purchased for the purpose of business.

This warranty is expressly subject to the Schneider Electric product being installed, wired, tested, operated and used in accordance with our instructions and specifications. Any alterations or modifications made to the product without our permission will void the warranty.

Schneider Electric will at its option repair, replace or refund any defective product. The cost of replacement or repair of a defective product is limited to the price of the product only. Schneider Electric will not be responsible for the cost of retrieving, removing, reinstalling, transporting (including return of the defective product to us) or re-testing a product.

How to make a claim: You shall provide Schneider Electric with adequate particulars of the defect within 28 days of the fault occurring. Contact your local Schneider Electric, PDL or Clipsal products' supplier and provide the details of the date of purchase, description of load or connections and the circumstances of the failure. Returned products must be securely packed and labelled for proper processing.

## *7.2 Technical and Sales Support*

For assistance with technical problems, contact your nearest Schneider Electric sales representative.

### Australia

Schneider Electric (Australia) Pty Ltd

Customer Care Australia: 1300 202 525, Fax 1300 202 556

Technical Support 1300 722 247 (Support Hotline for Australia)

Technical Support email: [cis.support@clipsal.com.au](mailto:cis.support@clipsal.com.au)

[www.schneider-electric.com.au](http://www.schneider-electric.com.au)

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