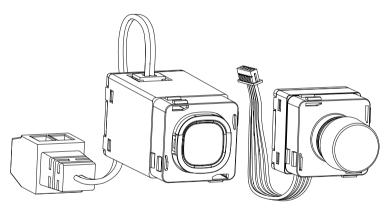




DALI Switch Mechanisms

DCDAL31 Series Installation Instructions



DCDAL31M - Master

DCDAL31S - Slave

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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



Never connect the DCDAL31 mechanism to mains power.

Do not open the DCDAL31 mechanism. No user serviceable parts inside.

2.0 Installation Requirements

2.1 DCDAL31MOD Coverage Pattern

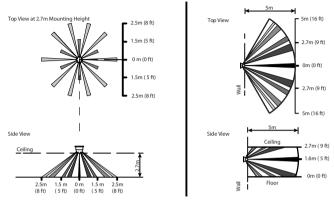


Figure 1: DCDAL31MOD - Coverage Pattern at 25°C

2.2 DCDAL31MPE Optimised Placement

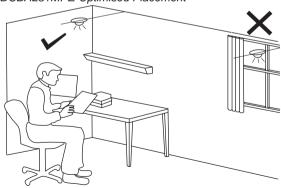


Figure 2: DCDAL31MPE - Optimised Placement

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.

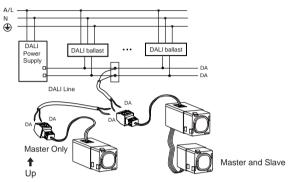


Figure 3: DALI Wiring Diagram

3.0 Assembly and Installation

3.1 Installing the Button Covers

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

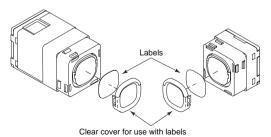


Figure 4: Installing the label and cover

3.2 Installing the Mechanisms on the Grid Plate

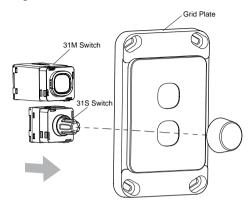


Figure 5: Installing the DCDAL31 mechanism on the grid plate

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.

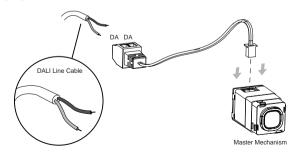


Figure 6: Connecting the DALI line cable

The DALI line cable must be a mains rated cable which is no greater than 2.5mm². 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

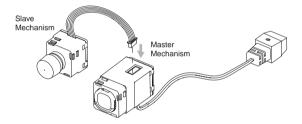


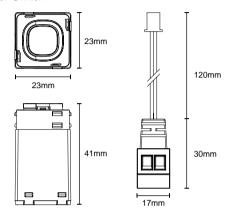
Figure 8: Connecting Slave switch to Master switch

4.0 Specifications

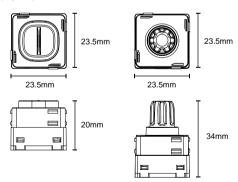
| Parameter | Description | |
|-------------------------------------|--|--|
| DALI Supply Voltage | 9.5 to 22.5V DC (Typical 16V DC) | |
| Max Abnormal Voltage | 240VAC | |
| Maximum Number of Units per Network | 20 | |
| Control Functions | DALI control | |
| DALI Connection | Screw terminal for 2.5mm 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 | | |
|--|-----------------------|--|--|--|
| | EN 61347-2-11 | Lamp control gear. Particular requirements for miscellaneous electronic circuits used with luminaires | | |
| CE | EN 61547 | RFI Emissions Standard Specification for equipment for general lighting purposes. EMC immunity requirements RFI Emissions Standard | | |
| European Committee for Standardisation | EN 55015 | Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment | | |
| Cianadianan | 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) | | |
| | | | | |
| | AS/NZS 61347- 2-11 | Particular requirements for miscellaneous electronic circuits used with luminaires | | |
| RCM | 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.

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