

### Rotary LED Dimmer

42E350RLD2M-VW  
PDL354RDMLED-VW

### Rotary Universal Dimmer

42E350RUD2M-VW  
PDL354RDMUN-VW

Installation Instructions

## For Your Safety

### DANGER

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

It is illegal for persons other than an appropriately licensed electrical contractors or other persons authorised by legislation to work on the fixed wiring of any electrical installation.

- To comply with all safety standards, the product must be used only for the purpose described in this instruction and must be installed in accordance with the wiring rules and regulation in the location where it is installed.
- There are no user serviceable parts inside the product.

**Failure to follow these instructions will result in death or serious injury.**

### WARNING

#### RISK OF ELECTRIC SHOCK

Hazardous voltage and electrical current may be present at the wire leads and outputs of this product even when the device is switched off.

- Lock out and tag the input circuit before accessing the wiring connections.
- The device needs to be installed with a switch.

**Failure to follow these instructions can result in death or serious injury.**

### CAUTION

#### EQUIPMENT DAMAGE HAZARD

Install the device according to instructions in this document.

- Pay attention to the specifications and wiring diagrams related to the installation.
- Do not use this product for any other purpose than specified in this instruction.
- Do not perform insulation tests on this product.

**Failure to follow these instructions can result in minor injuries, or equipment damage.**

## NOTICE

#### RISK OF EQUIPMENT DAMAGE OR MALFUNCTION (WIRING CONNECTIONS)

To avoid damaging the equipment and possibly voiding the warranty:

- Test operation during installation and correct any wiring errors immediately.
- Keep cable insulation away from the sides of the enclosure to avoid possible damage or long term degradation of the cable insulation.

**Failure to follow these instructions can result in equipment damage or malfunction.**

## NOTICE

#### RISK OF ABNORMAL OPERATION OR REDUCED PERFORMANCE

- Do not connect mixed load types to the Rotary Dimmer. Use the Iconic Pushbutton Electronic Switch 6 A for mixed loads.
- When using electronic transformers, load each transformer to at least 75% of its maximum rated load to reduce the possibility of lamp flicker when dimming. Refer to the manufacturer's specifications for the transformer being used.
- The Rotary Dimmer has a 1 W minimum load. When connecting loads that are sensitive to low leakage currents, fit a 31LCDA Load Correction Device to reduce the possibility of an unstable 'off' state.
- Some lamps may exhibit unexpected performance characteristics when cold. Dimming performance should improve once the lamp warms up. (Dimming performance may vary between lamp manufacturers.)
- Clipsal dimmable LED lamp types are recommended for compatibility assurance. Other LED loads may not be compatible—contact the manufacturer for compatibility advice. (Refer to clipsal.com/load for recommended LEDs.)
- Use only iron-core transformers compatible with electronic switches / phase controlled dimmers as recommended by the manufacturer.

**Failure to follow these instructions can result in abnormal equipment operation or reduced equipment performance.**

## NOTICE

#### EQUIPMENT DAMAGE HAZARD (LOAD AND OPERATION)

Operation at elevated temperatures or voltages outside of specification (240 V AC and 25 °C) may cause the thermal protection circuitry to operate. Operating with significant overload may cause the thermal fuse to blow and render the dimmer inoperable.

- Reduce the size of the connected load or use a different brand of lamp to prevent recurrence.
- Do not operate the product for prolonged periods in extreme conditions.

**Failure to follow these instructions can result in equipment damage.**

## NOTICE

#### MAXIMUM LOAD RATINGS APPLY

- Ensure that the number of Low Voltage Lighting Transformers connected to a single Rotary Dimmer does not exceed the maximum load rating of the dimmer.

**Failure to follow these instructions can result in equipment malfunction.**

## Product Range

This product is part of the Iconic range incorporating electronic product modules including dimmers, timers, timeclocks and USB chargers. For more information about the Iconic range, visit official **Clipsal and PDL websites**.

Complementing the range are Wall Plates and Parts Packs (available separately) in various colours to suit many interior finishes.

## Colour Options

Product Group	Product Name	Order No
Rotary Dimmer	Rotary Dimmer Parts Pack, Vivid White	40EDIMKB-VW   PDL300KBC-VW
Parts Packs	Rotary Dimmer Parts Pack, Warm Grey	40EDIMKB-WY   PDL300KBC-WY
	Rotary Dimmer Parts Pack, Cool Grey	40EDIMKB-CY   PDL300KBC-CY
	Rotary Dimmer Parts Pack, Anthracite	40EDIMKB-AN   PDL300KBC-AN

(Matching Wall Plates available separately.)

## Description and Features

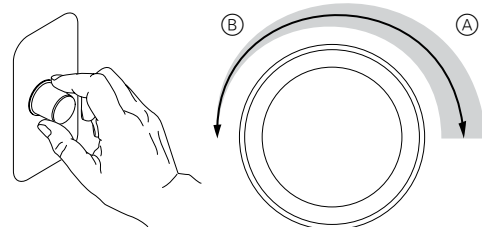
The Iconic Rotary Dimmer is a two-wire 350 W mechanism featuring an adjustable minimum brightness setting. The product can be used with 1-way and 2-way switching applications.

## Features

- Compatible with a wide range of load types (depending on model)
- Optimised dimming range with smooth LED control (depending on model)
- Short circuit & thermal overload protection
- Minimum brightness adjustment
- Suitable for 1-way and 2-way switching
- Wide range of plate and rotary knob colour variants available
- 1-, 2- or 3-gang wall plates available
- Complies with Australian, New Zealand and International EMC Standards

## Unit Operation

### Dimming and Brightening

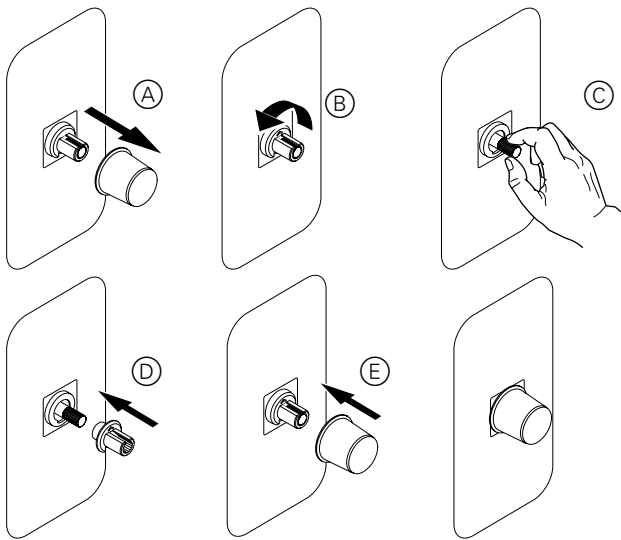


With the light switched On:

- ① Turn the dimmer adjustment knob clockwise **A** to brighten the light.
- ② Turn the dimmer adjustment knob counterclockwise **B** to dim the light.

*Note: If the light is still too bright when you have turned the adjustment knob fully counterclockwise, you can adjust the minimum brightness level.*

## Adjusting the Minimum Brightness Level



- ① Remove the dimmer adjustment knob from the mechanism shaft (A).
- ② If the adjustment knob adapter remains on the mechanism shaft, rotate the adapter until it is rotated fully anti-clockwise until it stops (B).
- ③ Switch the light On.
- ④ Rotate the mechanism shaft until the desired **minimum** light level is reached (C).
- ⑤ Hold the adapter so the keyway of the adapter aligns with the slot in the body, then slide the adapter onto the mechanism shaft (D), ensuring that the key of the adapter engages into with the slot on the mechanism surround.
- ⑥ Push the adjustment knob onto the adapter (E) ensuring the flat keyway of the knob, aligns with the flat of the shaft and then press the end of the knob until the knob is fully seated on the mechanism shaft.

## Advanced Load Handling Facilities

Iconic rotary dimmers incorporate patented universal dimming technology, including advanced, intelligent features to ensure that the connected load is handled appropriately.

**Dimming Mode Selection** The dimmer is capable of driving a wide range of load types, depending on the model. Upon power-up, the unit:

- Selects the correct dimming method to suit that load (Leading or Trailing Edge Phase Angle Control).

**Dynamic Auto-Ranging** The dimmer recognises that different loads have different capabilities. Each is able to dim over a different range, and may be able to dim over a wider range as the lamp warms up. The Dimmer:

- Determines the maximum brightness setting
- Determines the minimum brightness setting
- Dynamically validates and adjusts the minimum brightness setting during operation to enable stable operation at lower levels as the lamp warms up.

Note that initially the minimum brightness will be set to a "safe" level to ensure stable operation. After a short time when the lamps warm up, depending on the load type, it may be possible to dim to a lower setting.

**Error Detection and Self-Correction** The dimmer is capable of recognising a number of error conditions where unstable operation of the lamp may be detected. In many instances, the unit is capable of automatically correcting the problem. Typical error conditions include:

- lamp flicker / unstable operation
- lamp drop-out.

Note that while this facility is useful, it does not guarantee flawless operation. Such performance is a function of the design/construction of the lamp and may vary between lamp manufacturers. For LED loads, it is recommended to use Clipsal lamps – Clipsal LED loads are recommended for optimum performance and reliability.

## Overload Protection Facilities

Iconic rotary dimmers have a number of sophisticated protection mechanisms to reduce the risk of damage in the case of abnormal operating conditions.

**Thermal Overload Protection Circuitry** Iconic rotary dimmers incorporate two levels of thermal overload protection:

### Thermal Overload Protection

Automatically reduces lamp brightness should the dimmer be inadvertently overloaded. Extreme overloads will result in the load turning Off (primary defence against overload). The Thermal Overload Protection resets automatically once overload conditions are corrected.

### Thermal Cut-Out

The dimmer contains a non-resettable thermal fuse device designed to blow in case of catastrophic circuit failure. This is a secondary protection measure intended to operate as a backup in case of persistent or prolonged overload conditions.

If the thermal cut-out fuse blows, the unit will be rendered permanently inoperable and must be replaced.

*Note: The thermal fuse device is not replaceable by the user.*

Any significant overload should be avoided in order to prevent damage to the load, fixed wiring of the installation or other hardware connected to the affected circuit.

## Short Circuit Protection

Iconic rotary dimmers feature short circuit protection capabilities, designed to protect the dimmer under most abnormal operating conditions. This ensures that the dimmer can survive in case of wiring fault or catastrophic failure of the load.

The short circuit protection mechanism resets automatically once the short circuit condition is removed.

## Load Compatibility

### Important Notices for Rotary Dimmer

#### NOTICE

#### EQUIPMENT DAMAGE HAZARD (LOAD AND OPERATION)

Operation at elevated temperatures or voltages outside of specification (240 V AC and 25 °C) may cause the thermal protection circuitry to operate. Operating with significant overload may cause the thermal fuse to blow and render the dimmer inoperable.

- Reduce the size of the connected load or use a different brand of lamp to prevent reoccurrence.
- Do not operate the product for prolonged periods in extreme conditions.

**Failure to follow these instructions can result in equipment damage.**

#### NOTICE

#### MAXIMUM LOAD RATINGS APPLY

Ensure that the number of Low Voltage Lighting Transformers connected to a single Rotary Dimmer does not exceed the maximum load rating of the dimmer.

**Failure to follow these instructions can result in equipment malfunction.**

## Load Compatibility Table

### Rotary Dimmer

Load Symbol	Compatible Loads	Rotary LED Dimmer	Rotary Universal Dimmer
	Dimmable LED Lighting	350 W *	350 W *
	Non-dimmable LED Lighting	Not Compatible	Not Compatible
	Incandescent Lighting MV Halogen / Dichroic Lamps	350 W	350 W
	Low voltage halogen / dichroic lighting with electronic transformers	350 W	350 W
	Low voltage halogen / dichroic lighting with iron-core transformers	Not Compatible	350 W
	Dimmable Linear Fluorescent Lamps	150 W	150 W
	Non-dimmable Linear Fluorescent Lamps	Not Compatible	Not Compatible
	Dimmable Compact Fluorescent Lamps	150 W	150 W
	Non-dimmable Compact Fluorescent Lamps	Not Compatible	Not Compatible
	Small Motors (e.g. Ceiling and Exhaust Fans)	Not Compatible	Not Compatible

\* Refer to [clipsal.com/load](http://clipsal.com/load) for recommended Clipsal LEDs

## Installation Requirements

### ⚠️ DANGER

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### ⚠️ WARNING

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- Lock out and tag the input circuit before accessing the wiring connections.

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## ⚠ CAUTION

### EQUIPMENT DAMAGE HAZARD

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- Pay attention to the specifications and wiring diagrams related to the installation.
- Do not use this product for any other purpose than specified in this instruction.
- Do not perform insulation tests on this product.

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## NOTICE

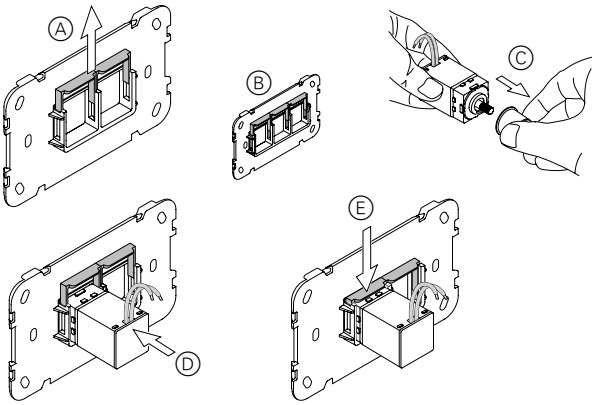
### RISK OF EQUIPMENT DAMAGE OR MALFUNCTION (WIRING CONNECTIONS)

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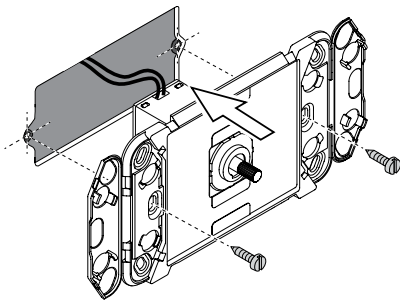
## Fitting the Mechanism to the Plate



- ① On the plate, move the locking bar (A) to the Open position.  
*Note: On multi-gang plates, the locking bar is a single piece covering all cutouts (B).*
- ② If fitted, remove the Adjustment knob and adapter from the dimmer mechanism shaft (C).
- ③ Push the head of the dimmer mechanism into the plate cutout (D) until the head clicks into place.
- ④ Once the mechanism is installed in the plate (or all mechanisms for multi-gang plates), move the locking bar to the Closed position (E).

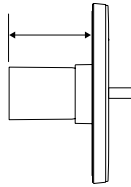
Do not replace the Adjustment knob and adapter until the plate has been fitted and fascia installed.

## Fitting the Plate



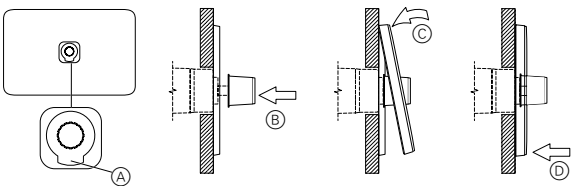
### NOTICE

Allow a minimum 35 mm depth in the wallbox / wall cavity to recess mechanisms and wiring.



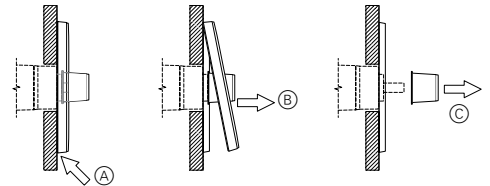
## Fascia Installation and Removal

### Installation



- ① Attach the Adjustment knob and adapter by aligning the adapter of the knob with the slot on the dimmer mechanism (A) and then pressing the adapter and adjustment knob fully onto the mechanism shaft (B).
- ② Place the upper section of the fascia against the upper section of the plate, as shown in (C).
- ③ Apply pressure to the bottom section of the fascia (D) so that the fascia "snaps in" to the plate.

### Removal



- ① Insert the flat tip of a plastic tool into either the slot located at the centre-top or centre-bottom edge of the fascia (A).
- ② Gently prise the fascia edge away from the plate (B) until the clips release the fascia.
- ③ Remove the adjustment knob and adapter from the mechanism shaft (C).

## Wiring Diagrams

## ⚠ CAUTION

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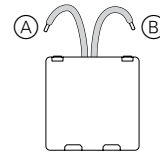
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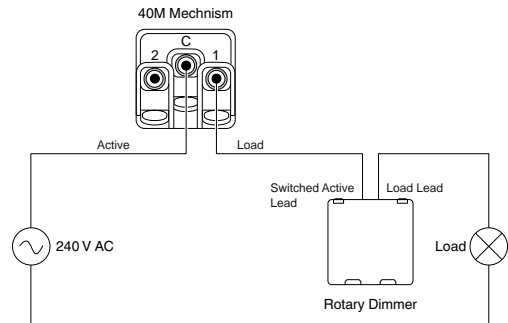
**Failure to follow these instructions can result in equipment damage or malfunction.**

## Overview

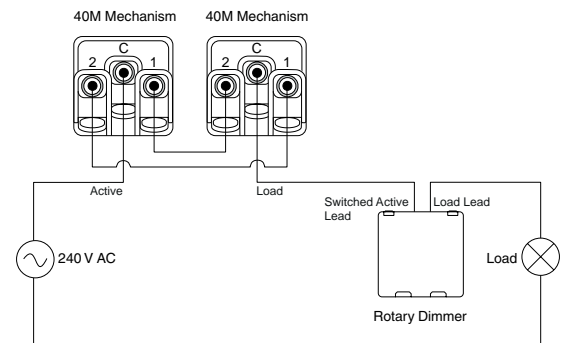


- (A) Switched Active
- (B) Load

## One-Way Application (example)



## Two-Way Application (example)



## Off-Peak Ripple Signal Injection Considerations

If dimmers are installed in areas where there are amplified ripple signals, flickering may be experienced at times of the ripple signal injection, depending on the load type and dimming level.

Whilst the Iconic rotary dimmers have been designed to tolerate the nominal level of regular off-peak ripple signals injected onto the mains supply. Some electricity suppliers may increase the signal strength without prior notice, which may have an impact on the products' ability to modulate ripple signals. This may lead to flickering of dimmed lights.

Please visit [clipsal.com/ripple](http://clipsal.com/ripple) and contact the supply authority for more information about ripple signals.

## Electrical Specifications

### Electrical Specification Notes

- Specifications typical @ 240 V AC, 25 °C
- Suitable for indoor use only
- No user-serviceable parts inside.

### Electrical Specifications

Parameter	42E350RLD2M-VW PDL354RDMLED-VW	42E350RUD2M-VW PDL354RDMUN-VW
Nominal Operating Voltage	220–240 V AC	
Nominal Operating Frequency	50 Hz	
Maximum Load (Dimming)	350 W	
Minimum Load (Dimming)	1 W	
Dimming Technique	Trailing Edge Phase Control	Leading Edge / Trailing Edge Phase Control (dynamically auto-selected)
<b>Wiring Configuration</b>		
Dimmable LED Lighting	350 W *	350 W *
Incandescent Lighting	350 W	350 W
MV Halogen / Dichroic Lamps		
Low voltage halogen / dichroic lighting with electronic transformers	350 W	350 W
Low voltage halogen / dichroic lighting with iron-core transformers	Not Compatible	350 W
Dimmable Linear Fluorescent Lamps	150 W	150 W
Dimmable Compact Fluorescent Lamps	150 W	150 W
Small Motors (e.g. Ceiling and Exhaust Fans)	Not Compatible	Not Compatible
Voltage/Frequency Stability	YES	
Short Circuit Protection	YES	YES
Thermal Overload Protection	YES	YES
Over-current/Over-temperature Protection	YES	
Multi-Gang Plate Capacity	Maximum 3 Mechanisms per Plate**	Maximum 3 Mechanisms per Plate**
Available Plates / Colours / Styles	Iconic Style, Standard and Architrave Options, Colour Packs for Rotary Dimmer (Plates available separately): Vivid White (VW), Warm Grey (WY), Cool Grey (CY), Anthracite (AN)	
Mounting Centres	84 mm Australian Pattern Plate	
Safety Compliances	AS/NZS 60669.2.1	
EMC Emission Compliance	AS/NZS 60669.2.1	

\* Refer to [clipsal.com/load](http://clipsal.com/load) for recommended Clipsal LEDs

\*\*Derate multiple dimmers in a plate as follows:

- 1 per plate 350 W
- 2 per plate 250 W each dimmer
- 3 per plate 150 W each dimmer

## Troubleshooting

### General Troubleshooting

Problem	Recommended Resolution
The LED load is glowing in the Off state and/or occasionally flickering when on.	Iconic Rotary Dimmers are designed to work with Clipsal LED loads. We do not recommend using other LED loads. If other LED loads are used and the described problem occurs, try installing a Clipsal 31LCDA load correction device across the load for improved dimming performance.
LED load is flickering when turned on from 2-way remote.	Refer to the notices in the section "Load Compatibility".
LED lights are flickering at the same time every night when dimmed.	This may be caused by increased/amplified off-peak ripple signals on the mains supply. Improvements may come from operating the dimmer at increased brightness. If problems continue, install a 3-wire switch such as the Iconic Pushbutton Electronic Switch 6 A. Refer to the section "Off-Peak Ripple Signal Injection Considerations" for more detail.

### Troubleshooting Notes

- Iconic Rotary Dimmers are designed to work with Clipsal LEDs for optimum performance and reliability. Other LED loads may not be compatible – contact the manufacturer for compatibility advice. (Refer to the Section "Load Compatibility" and [clipsal.com/load](http://clipsal.com/load) for recommended loads.)
- Contact Customer Care (see last page) for further guidance if issues persist.

## Warranty

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 two years from the date of installation. 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.

### Australia

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 labeled for proper processing.



**Australia**  
Schneider Electric (Australia) Pty Ltd

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