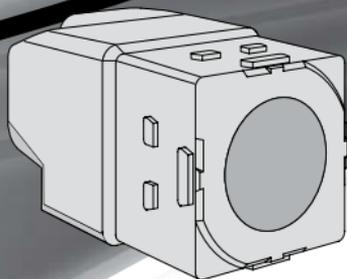


CLIPSAL[®]

by Schneider Electric



by Schneider Electric



Iconic Series
Pushbutton Universal Dimmer
(2-Wire, ControlLink)

41E300PBUD2SM-VW
PDL354PBDMUN-VW



Installation Instructions

REGISTERED DESIGN

Copyright Notice

The concepts, products and designs described in this document are the subject of international patents, and protected by international law. © Copyright Schneider Electric (Australia) Pty Ltd. All rights reserved.

Trademarks

Clipsal is a registered trademark of Schneider Electric (Australia) Pty Ltd.
Schneider Electric is a registered trademark of Schneider Electric (Australia) Pty Ltd.
All other logos and trademarks are the property of their respective owners.

Disclaimer

Schneider Electric (Australia) Pty Ltd reserves the right to change specifications or designs described in this manual without notice and without obligation.

Warnings

Read through the following instructions carefully and familiarise yourself with the device prior to installation, operation and maintenance. The warnings listed below can be found throughout the documentation and indicate potential risks and dangers or specific information that clarifies or simplifies a procedure.



The addition of this symbol to the “Danger” or “Warning” safety instructions indicates an electric danger that could result in serious injuries if the instructions are not followed.



This symbol presents a safety warning. It indicates a potential danger of personal injury. Follow all safety instructions with this symbol to avoid serious injuries or death.

DANGER

DANGER indicates an imminently hazardous situation that will inevitably result in serious or fatal injury if the instructions are not observed.

WARNING

WARNING indicates a possible danger that could result in death or serious injuries if it is not avoided.

CAUTION

CAUTION indicates a possible danger that could result in minor injuries if it is not avoided.

NOTICE

NOTICE provides information about procedures that do not represent the risk of any physical injury.

Table of Contents

1 For Your Safety	6
2 Product Range	7
3 Description	7
3.1 About ControlLink	7
3.2 Locking Bar	7
3.3 Combination Square / Phillips Drive Terminal Screws	7
3.4 Pushbutton Universal Dimmer	7
4 Features	8
5 Unit Operation	9
5.1 Pushbutton Universal Dimmer Operation	9
5.2 LED Indicator	9
6 Configuration Mode	9
6.1 Configuration Presets for Pushbutton Universal Dimmer	10
7 Advanced Load Handling Facilities	11
8 Overload Protection Facilities	12
9 Load Compatibility	13
9.1 Important Notices for Pushbutton Universal Dimmer	13
9.2 Load Compatibility Table	14
10 Incompatible Loads	15
11 Installation Requirements	16
11.1 Fitting the Dimmer to the Plate	16
11.2 Fitting the Plate	17
11.3 Fascia Installation and Removal	17
12 Wiring Diagrams	18
12.1 Connection Limitations	19
12.2 Overview	19
12.3 One-way Application (Switch/Dimmer)	19
12.4 Two-way / Three-way Application (Switch/Dimmer)	20
12.5 Multi-Gang Derating	21
12.6 Off-Peak Ripple Signal Injection Considerations	21

13 Electrical Specifications	22
13.1 Electrical Specification Notes	22
13.2 Electrical Specifications	22
14 Troubleshooting	24
14.1 Dimming	24
15 Warranty	27

1 For Your Safety

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

It is illegal for persons other than an appropriately licensed electrical contractor 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 or dimmer controls set to zero brightness level.

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

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 perform insulation tests on this product.
- Do not use this product for any other purpose than specified in this instruction.

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

2 Product Range

The Iconic range includes a number of modular electronic switches, dimmers and timers/timeclocks incorporating advanced remote load control technology with Multi-Way dimming/switching capabilities.

The range also includes a selection of USB charging mechanisms.

Complimenting the range are Parts Packs (available separately) in various colours to complement the installation decor.

3 Description

3.1 About ControlLink

ControlLink is a technology, available only in the Iconic range, that makes it easier for installers to configure Multi-Way switching and dimming using standard electrical wiring techniques. Using a single control wire (along with an active wire), loads can be controlled remotely and timers triggered to allow run-on timer and similar applications.

3.2 Locking Bar

The Iconic range includes a new patented locking bar feature to secure the mechanism body to the mounting plate. The mechanisms are easy to remove from the plate using this new mounting technique.

3.3 Combination Square / Phillips Drive Terminal Screws

Iconic mechanisms feature terminal screws with combined Square Drive / Phillips Drive heads, providing installers with the advantages of the Square Drive while retaining the commonality of the Phillips Drive.

3.4 Pushbutton Universal Dimmer

The Iconic Pushbutton Universal Dimmer combines a 2-wire switch and 300 W dimmer in a single Pushbutton mechanism. Units feature multi-way dimming and switching capability, LED indicator and the ability to be remotely controlled through ControlLink.

Designed for universal load compatibility, Iconic Pushbutton Universal Dimmer units utilise powerful and sophisticated microcontroller-based digital universal dimming technology, to provide full control of many types of loads, whether it be dimmable LED*, dimmable CFL lighting, mains voltage halogen or dichroic lamps, iron-core or electronic low voltage lighting transformers as used in downlight applications.

The Pushbutton Universal Dimmer has been specifically designed to handle energy efficient lighting. Intelligent load handling features include automatic load detection and dimming mode selection, dynamic auto-ranging, intelligent ignition sequencing, error detection and self-correction algorithms.

Pushbutton Universal Dimmer incorporates over-current and over-temperature protection and are capable of withstanding persistent short circuit conditions, making them rugged, robust and reliable.

* *Clipsal dimmable LED loads recommended*

4 Features

- Integrally switched push button (tactile) control
- Suitable for Multi-Way dimming and switching through ControlLink
- Minimum brightness adjustment
- Inbuilt over-current and over-temperature protection
- Short circuit protection
- Configurable LED indicator
- Built using Clipsal's robust digital universal dimming technology
- Incorporates advanced load handling capabilities
- 300 W Power Rating
- Universal dimmer – suitable for a wide range of load types:
 - Clipsal Dimable LED Lamps*
 - Electronic low voltage lighting transformers
 - Iron-core low voltage lighting transformers
 - 240 V incandescent halogen lamps
- Automatic soft-start / kick-start operation depending on the load type
- Multi-gang capacity up to 6 mechanisms per plate. Multiple mechanisms installed into a plate must be derated. See derating table in section "12.5 Multi-Gang Derating".
- Easy wiring using onboard integral terminals with unique combination Square Drive / Phillips Drive terminal screws
- Wide range of plate and button colour variants available
- Complies with Australia and New Zealand electrical safety and EMC Standard.

* *Visit Clipsal.com for recommended loads – other LED loads may not be compatible. (Contact the manufacturer for compatibility advice.)*

5 Unit Operation

5.1 Pushbutton Universal Dimmer Operation

- Short Press**
- Press the pushbutton to switch the light On or Off.
 - The dimmer has memory, and will remember the previous dim setting, when you switch the light on. When you press the pushbutton to switch the light Off, the unit will store the current setting in memory.
- Long Press**
- Press and hold the pushbutton to dim the light up and down. Release to stop dimming.
 - The dimmer will cycle up and down alternately. With a Long Press while the light is On, the dimmer will dim down (decrease brightness) by default. With a Long Press when the light is Off, the dimmer will dim upwards (increase brightness) by default. A subsequent Long Press will dim in the opposite direction.
 - Whilst dimming, if the light reaches its maximum or minimum brightness level, dimming stops at that level.
 - A single ramp cycle takes about 10 seconds to complete (full range, min. to max.).
 - If the pushbutton is not pressed for 15 seconds, the dimmer is set to dim down on the next Long Press.

Note: If the pushbutton is pressed for longer than 15 seconds, the pushbutton dimmer unit will go into Configuration Mode (see section "6 Configuration Mode")

5.2 LED Indicator

Iconic pushbutton units incorporate a configurable LED Indicator. By default, the indicator displays at 100 % brightness when the load is switched On, and displays at 10 % brightness when the load is switched Off. This behaviour can be modified by applying a Configuration Preset (see section "6 Configuration Mode").

6 Configuration Mode

Iconic devices feature a number of Configuration Presets that can be selected via the pushbutton whilst the product is in a configuration mode. The number of Configuration Presets available in each Iconic product depends on the capabilities and features of that product. Whilst in configuration mode, the connected load will be switched off and control will not be possible.

Entering Configuration Mode

- ① Press and hold the pushbutton for at least 15 seconds.
- ② When the LED indicator starts flashing once every second, the unit has entered Configuration Mode with Configuration Preset 1 as the current selection.

Selecting a Configuration Preset

- ① Once in configuration mode, short press the pushbutton to cycle through Configuration Presets.
- ② Observe the number of LED Indicator flashes (followed by a pause) to determine the current Preset selected.
For Example: 3 flashes then a pause indicates that Configuration Preset 3 is selected.
- ③ If the highest preset (preset 8) is selected, the next short press will roll back to the start (preset 1).

Refer to the “Configuration Presets” section below for information about each Preset.

6.1 Configuration Presets for Pushbutton Universal Dimmer

Preset	Setting
--------	---------

- | | |
|---|--|
| 1 | Program minimum brightness level <ul style="list-style-type: none">• Long Press pushbutton to start adjusting• Short Press after adjustment to save and exit Configuration Mode |
| 2 | Program maximum brightness level <ul style="list-style-type: none">• Long Press pushbutton to start adjusting• Short Press after adjustment to save and exit Configuration Mode |
| 3 | Disable Kick Start mode (default) |
| 4 | Enable Kick Start mode |
| 5 | Indicator settings (ON state: 100 %; OFF state: 10 %) (default) |
| 6 | Indicator settings (ON state: 100 %; OFF state: 0 %) |
| 7 | Indicator settings (ON state: 0 %; OFF state: 0 %) |
| 8 | Reset to Factory Defaults: <ul style="list-style-type: none">• Kick Start mode disabled• Min. Dimmer Brightness Level: 10 %• Max. Dimmer Brightness Level: 100 %• LED Indicator ON State brightness: 100 %• LED indicator OFF State brightness: 10 % |

Exit Configuration Mode

- If the pushbutton is pressed for more than 15 seconds while in Configuration Mode, the currently selected configuration preset is stored and the dimmer exits Configuration Mode.
- If more than 30 seconds elapse in Configuration Mode without the pushbutton being pressed, the dimmer exits Configuration Mode without storing any changes.

7 Advanced Load Handling Facilities

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

Automatic Load Detection and Dimming Mode Selection

The Pushbutton Universal Dimmer is capable of driving a wide range of load types. Upon power-up, the unit:

- Automatically detects the type of load connected,
- Determines the best control method to regulate the load,
- Selects the correct dimming method to suit that load (Leading or Trailing Edge Phase Angle Control).

Dynamic Auto-Ranging

The Pushbutton Universal Dimmer recognises that different loads have different capabilities. Each is able to be dimmed over a different range, and may be able to be dimmed 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.

Intelligent Ignition Sequencing

Some loads require special handling to ensure proper start-up. Most lighting loads require a traditional "Soft Start", whereas some loads may require a Kick-Start to ensure the lamp will strike. The Pushbutton Universal Dimmer is able to automatically detect the required start-up characteristics to suit the connected load type.

Soft Start: For all regular lighting loads.

Kick Start: Selected for those loads that need it (e.g. CFL).

Note that the ignition sequencing algorithm will initially "search" for the best start-up method, and some unexpected ramping effects can be observed at start-up. After three (3) successive on/off operations the dimmer will "learn" the appropriate start-up procedure. The dimmer start-up sequence will be reset after a power failure, or after the removal and replacement of (all) lamps.

Error Detection and Self-Correction The Pushbutton Universal 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 feature 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.

Power Failure Recovery The Pushbutton Universal Dimmer has on-board non-volatile memory, and is capable of storing the previous brightness settings prior to loss of power.

Short Duration Power Failure (<5 seconds):

- Automatically restores the output levels set prior to the power failure.

Longer Duration Power Failure (>5 seconds)

- Powers up in the OFF state.

8 Overload Protection Facilities

The Iconic range has a number of sophisticated protection mechanisms to reduce the risk of damage in the case of abnormal operating conditions.

Thermal Overload Protection Circuitry The Iconic range incorporates 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 switching Off (primary defence against overload). The Thermal Overload Protection resets automatically once overload conditions are corrected.

Thermal Cut-Out

The Pushbutton Universal Dimmer contains a non-resettable thermal fuse 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 dimmer 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** Whilst Iconic dimmers feature short circuit protection capabilities designed to protect the dimmer under most abnormal operating conditions. This does not ensure the dimmer can survive in every case of wiring fault, or catastrophic failure of the load.
- If activated, the short circuit protection mechanism resets automatically once the short circuit condition is removed.

9 Load Compatibility

9.1 Important Notices for Pushbutton Universal 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

RISK OF ABNORMAL OPERATION OR REDUCED PERFORMANCE

- Do not connect mixed load types to the Pushbutton Universal Dimmer. Use the 3-wire 6 A electronic switch for mixed loads or incompatible 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 Pushbutton Universal Dimmer requires a 10 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.
- When using Controllink pushbuttons for multi-way dimming of LED loads, install a 31LCDA Load Correction Device to ensure optimum performance and a stable 'off' state.

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

NOTICE**RISK OF ABNORMAL OPERATION OR REDUCED PERFORMANCE**

- Use the 3-wire 6 A electronic switch for non-dimmable and motor loads.
- 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**MAXIMUM LOAD RATINGS APPLY**

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

Failure to follow these instructions can result in equipment malfunction.

9.2 Load Compatibility Table**Pushbutton Universal Dimmer**

Load Symbol	Compatible Loads	Dimmer
	Dimmable LED Lighting	200 W*
	Non-dimmable LED Lighting	Not Compatible
	Incandescent Lighting MV Halogen / Dichroic Lamps	300 W
	Low voltage halogen / dichroic lighting with electronic transformers	300 W
	Low voltage halogen / dichroic lighting with iron-core transformers	300 W

	Dimmable Linear Fluorescent Lamps	200 W**
	Non-dimmable Linear Fluorescent Lamps	Not Compatible
	Dimmable Compact Fluorescent Lamps	200 W***
	Non-dimmable Compact Fluorescent Lamps	Not Compatible
	Small Motors (e.g. Ceiling and Exhaust Fans)	Not Compatible
	Sensors	Not Compatible
	Contactors	Not Compatible

* Refer to clipsal.com/load for recommended Clipsal LEDs

** Selected makes/models with electronic ballast only

*** Selected makes/models only

10 Incompatible Loads

The Pushbutton Universal Dimmer described in this instruction is not compatible for use with motor/fan loads.

Exercise care when using Dimmable CFL/LED load types. Use only lamps/ballasts that are compatible with phase angle control. Refer to clipsal.com/load for recommended Clipsal LEDs – other LEDs may not be compatible with phase controlled dimmers (contact the manufacturer for compatibility advice). In case of unexpected behavior, a 31LCDA load correction device wired across the load may resolve any issues.

Refer to the manufacturer's specifications for recommendations. Warranty is void when controlling incompatible load types as determined by Schneider Electric (Australia) Pty Ltd.

11 Installation Requirements

WARNING

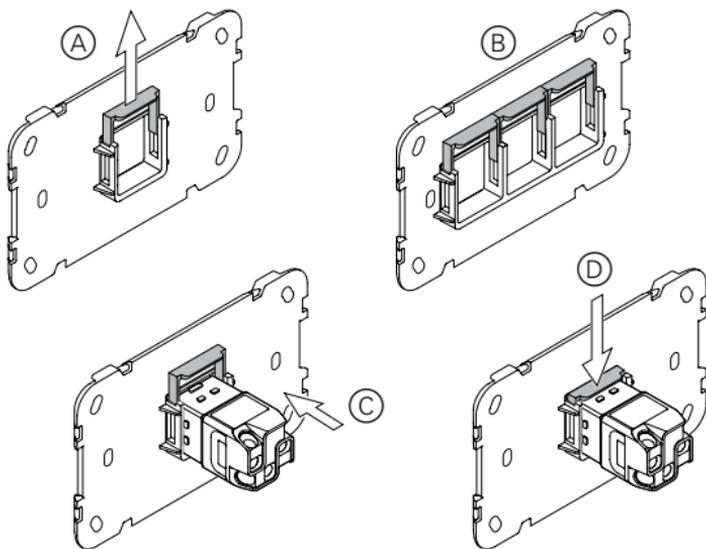
RISK OF ELECTRIC SHOCK

Hazardous voltage and electrical current may be present at the wire leads and outputs of this product even when the device is switched off or dimmer controls set to zero brightness level.

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

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

11.1 Fitting the Dimmer to the Plate

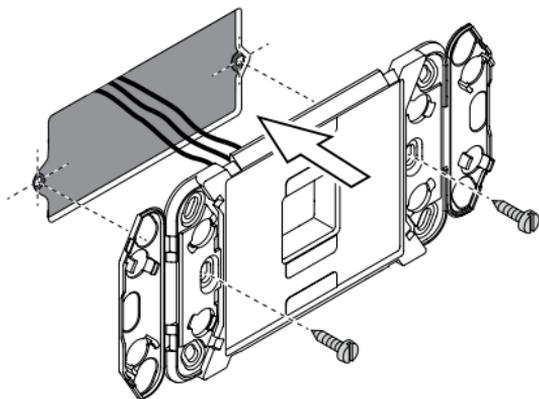


- ① On the plate, move the locking bar (A) to the Open position.

Note: On multi-gang plates, the locking bar is a single piece covering all cutouts (B).

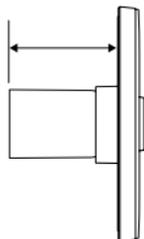
- ② Push the head of the dimmer into the plate cutout (C) until the dimmer clicks into place.
- ③ Once the dimmer mechanism is installed in the plate (or all mechanisms for multi-gang plates), move the locking bar to the Closed position (D).

11.2 Fitting the Plate

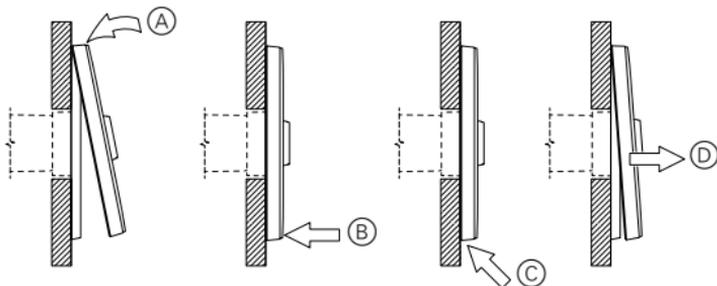


NOTICE

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



11.3 Fascia Installation and Removal



Installation

- ① Place the upper section of the fascia against the upper section of the plate, as shown in (A).
- ② Apply pressure to the bottom section of the fascia (B) so that the fascia “snaps in” to the plate.

Removal

- ① Insert the flat tip of a plastic tool into the slot located at the centre of each long edge of the fascia (C).
- ② Gently prise the fascia edge away from the plate (D) until the clips release the fascia.

12 Wiring Diagrams

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

It is illegal for persons other than an appropriately licensed electrical contractor 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 terminals of this product even when the device is switched off or dimmer controls set to zero brightness level.

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

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

NOTICE

RISK OF EQUIPMENT DAMAGE OR MALFUNCTION (WIRING CONNECTIONS)

To avoid damaging the equipment and possibly voiding the warranty:

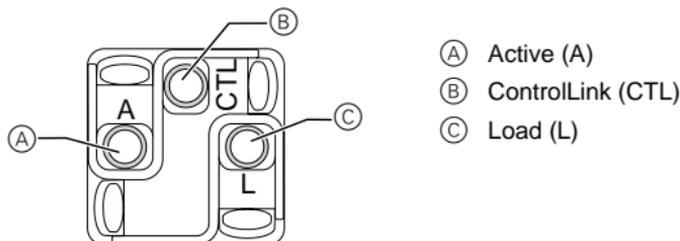
- Do not connect load terminals of multiple Primary Units in parallel.
- Do not connect a ControlLink Remote Unit directly to the load.
- Always wire Remote Units to the same circuit and phase as the Primary Unit.
- Test operation during installation and correct any wiring errors immediately.
- Keep 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.

12.1 Connection Limitations

Multiple ControlLink controlling devices can be connected to a single Primary Unit, allowing multi-way control of the load. A maximum total cable length of 30 metres is permitted.

12.2 Overview

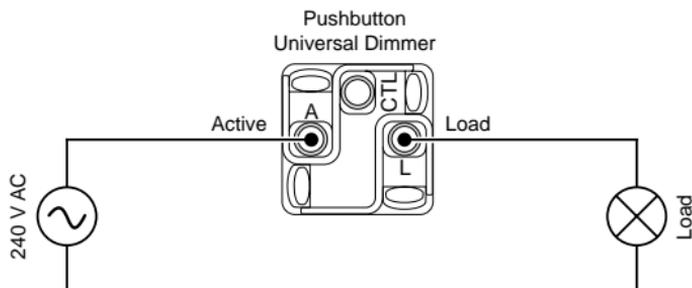


About the ControlLink Terminal

Connect the ControlLink and Active terminals of the Pushbutton Universal Dimmer to a compatible ControlLink device, such as the Iconic ControlLink Pushbutton, to achieve multi-way switching and dimming.

ControlLink recognises both short press (switch) and long press (dimmer) on the CTL terminal and operates the dimmer accordingly.

12.3 One-way Application (Switch/Dimmer)



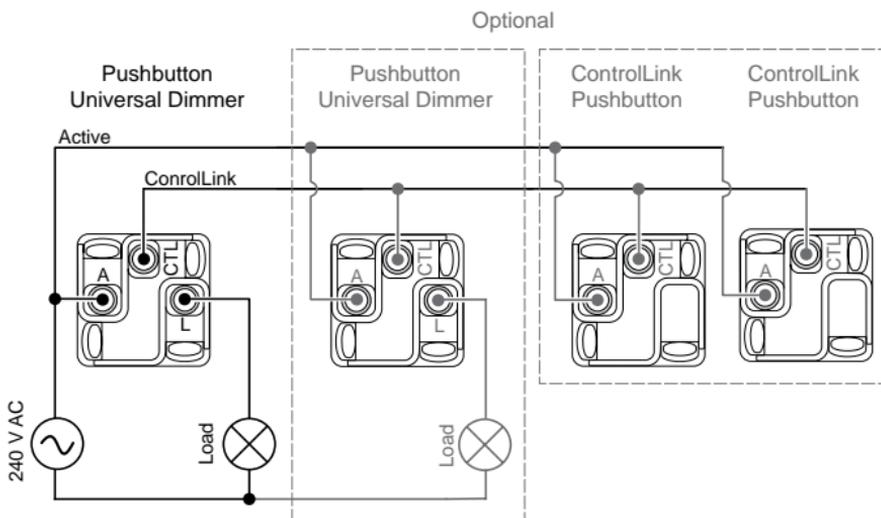
12.4 Two-way / Three-way Application (Switch/Dimmer)

1x Pushbutton Universal Dimmer

Optional, Additional:

1x Pushbutton Universal Dimmer

2x ControlLink Pushbutton



12.5 Multi-Gang Derating

For applications where Iconic Pushbutton Universal Dimmers are multi-ganged, derate the maximum load rating of each unit according to the derating table shown below.

NOTICE

The load figures shown below are based on a nominal voltage of 220-240 V AC.

Primary Mechanisms per Plate	Max. Load per Primary Mechanism (Dimmer)
1	300 W
2	300 W
3	250 W
4	200 W
5	150 W
6	100 W

NOTICE

Only Primary Units need be derated. Multi-Way Remote Units on the same plate can be ignored for the purpose of multi-gang derating.

12.6 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.

The Clipsal Iconic products have been designed to compensate for the nominal level of regular off-peak ripple signals injected onto the mains supply. However, 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 and contact the supply authority for more information about ripple signals.

13 Electrical Specifications

13.1 Electrical Specification Notes

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

13.2 Electrical Specifications

Parameter	41E300PBUD2SM-VW / PDL354PBDMUN-VW
Nominal Operating Voltage	220–240 V AC
Nominal Operating Frequency	50 Hz
Maximum Load (Dimming)	300 W
Minimum Load (Dimming)	10 W
Dimming Technique	Leading Edge / Trailing Edge Phase Control (dynamically auto-selected)

Wiring Configuration:

• Incandescent Loads	Dimmer: 300 W
• MV Halogen Loads	Dimmer: 300 W
• Electronic LV Lighting Transformers	Dimmer: 300 W
• Iron Core LV Lighting Transformers (EI and Toroidal Types)	Dimmer: 300 W
• “Dimmable” Linear Fluorescent Ballasts (Selected Make/Models Only)	Dimmer: 200 W
• Non-dimmable Linear Fluorescent Ballasts	Not Compatible
• “Dimmable” Compact Fluorescent Loads (Selected Make/Models Only)	Dimmer: 200 W
• Non-dimmable Compact Fluorescent Loads	Not Compatible
• “Dimmable” LED Lighting Drivers (Refer to clipsal.com/load for recommended Clipsal LEDs)	Dimmer: 200 W
• Non-dimmable LED Lighting Drivers	Not Compatible
• Small Motors (e.g. Ceiling and Exhaust Fans)	Not Compatible
• Sensors and Contactors	Not Compatible
Voltage / Frequency Stability	YES
Overcurrent / Overtemperature Protection	YES

Short Circuit Protection	YES
Soft-Start and Kick Start-Features	YES (Automatically selected to suit load type)
LED Indicator	Green, Halo (with Configuration Preset indication)
Multi-Way Control	YES
Multi-Gang Plate Capacity	Maximum 3 Primary Mechanisms per Plate, Combinations Allowed, Derating to be applied (refer to section 'Multi-Gang Derating')
Available Plate / Control Styles	Iconic Style, Standard and Architrave Options, Colour Packs for Pushbutton Caps and Plates: 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 Compliance	AS/NZS 60669.2.1

14 Troubleshooting

14.1 Dimming

Problem

The LED load is glowing in the Off state and/or occasionally flickering when on.

LED load is flickering when turned on from 2-way remote.

LED lights are flickering at the same time every night when dimmed.

Recommended Resolution

Iconic 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 the following remedies:

- Install a Clipsal 31LCDA load correction device across the load for improved dimming performance.

Refer to the notices in the section "Load Compatibility".

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.

Refer to the section "Off-Peak Ripple Signal Injection Considerations" for more detail.

Troubleshooting Notes

- Ensure to use Iconic 3-wire products on non-dimmable or non-lighting loads (such as motors).
- The Iconic Pushbutton Universal Dimmer is 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 for recommended loads.)
- Contact Customer Care (see last page) for further guidance if issues persist.

15 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.

CLIPSAL

by Schneider Electric

Australia

Schneider Electric (Australia) Pty Ltd

Customer Care Australia:

1300 369 233

Email:

customercare.au@schneider-electric.com

www.schneider-electric.com.au



by Schneider Electric

New Zealand

Schneider Electric (NZ) Ltd

38 Business Parade South, Highbrook,

East Tamaki, Manukau 2013

P.O. Box 259370 Botany, Manukau 2163

Telephone +64 9-829 0490

Fax +64 9-829 0491

After hours service hotline:

0800 735 4357 (New Zealand only)

Customer Care: 0800 652 999

Email: sales@nz.schneider-electric.com

www.schneider-electric.com

Schneider Electric reserves the right to change specifications, modify designs and discontinue items without incurring obligation and whilst every effort is made to ensure that descriptions, specifications and other information in this catalogue are correct, no warranty is given in respect thereof and the company shall not be liable for any error therein.

© Schneider Electric 2016

This material is copyright under Australian and international laws. Except as permitted under the relevant law, no part of this work may be reproduced by any process without prior written permission of and acknowledgement to Schneider Electric.

Schneider Electric acknowledges that the Australian Standard Certified Product logo is a trademark of SAI Global, and that the Activfire Certified logo is a trademark of CSIRO.

Copyright Notice

The concepts, products and designs described in this document are the subject of international patents, and protected by international law. © Copyright Schneider Electric (Australia) Pty Ltd. All rights reserved.

Trademarks

Clipsal is a registered trademark of Schneider Electric (Australia) Pty Ltd.
Schneider Electric is a registered trademark of Schneider Electric (Australia) Pty Ltd.
All other logos and trademarks are the property of their respective owners.

Disclaimer

Schneider Electric (Australia) Pty Ltd reserves the right to change specifications or designs described in this manual without notice and without obligation.

Warnings

Read through the following instructions carefully and familiarise yourself with the device prior to installation, operation and maintenance. The warnings listed below can be found throughout the documentation and indicate potential risks and dangers or specific information that clarifies or simplifies a procedure.



The addition of this symbol to the “Danger” or “Warning” safety instructions indicates an electric danger that could result in serious injuries if the instructions are not followed.



This symbol presents a safety warning. It indicates a potential danger of personal injury. Follow all safety instructions with this symbol to avoid serious injuries or death.

DANGER

DANGER indicates an imminently hazardous situation that will inevitably result in serious or fatal injury if the instructions are not observed.

WARNING

WARNING indicates a possible danger that could result in death or serious injuries if it is not avoided.

CAUTION

CAUTION indicates a possible danger that could result in minor injuries if it is not avoided.

NOTICE

NOTICE provides information about procedures that do not represent the risk of any physical injury.

Table of Contents

1 For Your Safety	6
2 Product Range	7
3 Description	7
3.1 About ControlLink	7
3.2 Locking Bar	7
3.3 Combination Square / Phillips Drive Terminal Screws	7
3.4 Pushbutton Universal Dimmer	7
4 Features	8
5 Unit Operation	9
5.1 Pushbutton Universal Dimmer Operation	9
5.2 LED Indicator	9
6 Configuration Mode	9
6.1 Configuration Presets for Pushbutton Universal Dimmer	10
7 Advanced Load Handling Facilities	11
8 Overload Protection Facilities	12
9 Load Compatibility	13
9.1 Important Notices for Pushbutton Universal Dimmer	13
9.2 Load Compatibility Table	14
10 Incompatible Loads	15
11 Installation Requirements	16
11.1 Fitting the Dimmer to the Plate	16
11.2 Fitting the Plate	17
11.3 Fascia Installation and Removal	17
12 Wiring Diagrams	18
12.1 Connection Limitations	19
12.2 Overview	19
12.3 One-way Application (Switch/Dimmer)	19
12.4 Two-way / Three-way Application (Switch/Dimmer)	20
12.5 Multi-Gang Derating	21
12.6 Off-Peak Ripple Signal Injection Considerations	21

13 Electrical Specifications	22
13.1 Electrical Specification Notes	22
13.2 Electrical Specifications	22
14 Troubleshooting	24
14.1 Dimming	24
15 Warranty	27

1 For Your Safety

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

It is illegal for persons other than an appropriately licensed electrical contractor 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 or dimmer controls set to zero brightness level.

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

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 perform insulation tests on this product.
- Do not use this product for any other purpose than specified in this instruction.

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

2 Product Range

The Iconic range includes a number of modular electronic switches, dimmers and timers/timeclocks incorporating advanced remote load control technology with Multi-Way dimming/switching capabilities.

The range also includes a selection of USB charging mechanisms.

Complimenting the range are Parts Packs (available separately) in various colours to complement the installation decor.

3 Description

3.1 About ControlLink

ControlLink is a technology, available only in the Iconic range, that makes it easier for installers to configure Multi-Way switching and dimming using standard electrical wiring techniques. Using a single control wire (along with an active wire), loads can be controlled remotely and timers triggered to allow run-on timer and similar applications.

3.2 Locking Bar

The Iconic range includes a new patented locking bar feature to secure the mechanism body to the mounting plate. The mechanisms are easy to remove from the plate using this new mounting technique.

3.3 Combination Square / Phillips Drive Terminal Screws

Iconic mechanisms feature terminal screws with combined Square Drive / Phillips Drive heads, providing installers with the advantages of the Square Drive while retaining the commonality of the Phillips Drive.

3.4 Pushbutton Universal Dimmer

The Iconic Pushbutton Universal Dimmer combines a 2-wire switch and 300 W dimmer in a single Pushbutton mechanism. Units feature multi-way dimming and switching capability, LED indicator and the ability to be remotely controlled through ControlLink.

Designed for universal load compatibility, Iconic Pushbutton Universal Dimmer units utilise powerful and sophisticated microcontroller-based digital universal dimming technology, to provide full control of many types of loads, whether it be dimmable LED*, dimmable CFL lighting, mains voltage halogen or dichroic lamps, iron-core or electronic low voltage lighting transformers as used in downlight applications.

The Pushbutton Universal Dimmer has been specifically designed to handle energy efficient lighting. Intelligent load handling features include automatic load detection and dimming mode selection, dynamic auto-ranging, intelligent ignition sequencing, error detection and self-correction algorithms.

Pushbutton Universal Dimmer incorporates over-current and over-temperature protection and are capable of withstanding persistent short circuit conditions, making them rugged, robust and reliable.

* *Clipsal dimmable LED loads recommended*

4 Features

- Integrally switched push button (tactile) control
- Suitable for Multi-Way dimming and switching through ControlLink
- Minimum brightness adjustment
- Inbuilt over-current and over-temperature protection
- Short circuit protection
- Configurable LED indicator
- Built using Clipsal's robust digital universal dimming technology
- Incorporates advanced load handling capabilities
- 300 W Power Rating
- Universal dimmer – suitable for a wide range of load types:
 - Clipsal Dimable LED Lamps*
 - Electronic low voltage lighting transformers
 - Iron-core low voltage lighting transformers
 - 240 V incandescent halogen lamps
- Automatic soft-start / kick-start operation depending on the load type
- Multi-gang capacity up to 6 mechanisms per plate. Multiple mechanisms installed into a plate must be derated. See derating table in section "12.5 Multi-Gang Derating".
- Easy wiring using onboard integral terminals with unique combination Square Drive / Phillips Drive terminal screws
- Wide range of plate and button colour variants available
- Complies with Australia and New Zealand electrical safety and EMC Standard.

* Visit Clipsal.com for recommended loads – other LED loads may not be compatible. (Contact the manufacturer for compatibility advice.)

5 Unit Operation

5.1 Pushbutton Universal Dimmer Operation

- Short Press**
- Press the pushbutton to switch the light On or Off.
 - The dimmer has memory, and will remember the previous dim setting, when you switch the light on. When you press the pushbutton to switch the light Off, the unit will store the current setting in memory.
- Long Press**
- Press and hold the pushbutton to dim the light up and down. Release to stop dimming.
 - The dimmer will cycle up and down alternately. With a Long Press while the light is On, the dimmer will dim down (decrease brightness) by default. With a Long Press when the light is Off, the dimmer will dim upwards (increase brightness) by default. A subsequent Long Press will dim in the opposite direction.
 - Whilst dimming, if the light reaches its maximum or minimum brightness level, dimming stops at that level.
 - A single ramp cycle takes about 10 seconds to complete (full range, min. to max.).
 - If the pushbutton is not pressed for 15 seconds, the dimmer is set to dim down on the next Long Press.

Note: If the pushbutton is pressed for longer than 15 seconds, the pushbutton dimmer unit will go into Configuration Mode (see section "6 Configuration Mode")

5.2 LED Indicator

Iconic pushbutton units incorporate a configurable LED Indicator. By default, the indicator displays at 100 % brightness when the load is switched On, and displays at 10 % brightness when the load is switched Off. This behaviour can be modified by applying a Configuration Preset (see section "6 Configuration Mode").

6 Configuration Mode

Iconic devices feature a number of Configuration Presets that can be selected via the pushbutton whilst the product is in a configuration mode. The number of Configuration Presets available in each Iconic product depends on the capabilities and features of that product. Whilst in configuration mode, the connected load will be switched off and control will not be possible.

Entering Configuration Mode

- ① Press and hold the pushbutton for at least 15 seconds.
- ② When the LED indicator starts flashing once every second, the unit has entered Configuration Mode with Configuration Preset 1 as the current selection.

Selecting a Configuration Preset

- ① Once in configuration mode, short press the pushbutton to cycle through Configuration Presets.
- ② Observe the number of LED Indicator flashes (followed by a pause) to determine the current Preset selected.
For Example: 3 flashes then a pause indicates that Configuration Preset 3 is selected.
- ③ If the highest preset (preset 8) is selected, the next short press will roll back to the start (preset 1).

Refer to the “Configuration Presets” section below for information about each Preset.

6.1 Configuration Presets for Pushbutton Universal Dimmer

Preset	Setting
--------	---------

- | | |
|---|--|
| 1 | Program minimum brightness level <ul style="list-style-type: none">• Long Press pushbutton to start adjusting• Short Press after adjustment to save and exit Configuration Mode |
| 2 | Program maximum brightness level <ul style="list-style-type: none">• Long Press pushbutton to start adjusting• Short Press after adjustment to save and exit Configuration Mode |
| 3 | Disable Kick Start mode (default) |
| 4 | Enable Kick Start mode |
| 5 | Indicator settings (ON state: 100 %; OFF state: 10 %) (default) |
| 6 | Indicator settings (ON state: 100 %; OFF state: 0 %) |
| 7 | Indicator settings (ON state: 0 %; OFF state: 0 %) |
| 8 | Reset to Factory Defaults: <ul style="list-style-type: none">• Kick Start mode disabled• Min. Dimmer Brightness Level: 10 %• Max. Dimmer Brightness Level: 100 %• LED Indicator ON State brightness: 100 %• LED indicator OFF State brightness: 10 % |

Exit Configuration Mode

- If the pushbutton is pressed for more than 15 seconds while in Configuration Mode, the currently selected configuration preset is stored and the dimmer exits Configuration Mode.
- If more than 30 seconds elapse in Configuration Mode without the pushbutton being pressed, the dimmer exits Configuration Mode without storing any changes.

7 Advanced Load Handling Facilities

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

Automatic Load Detection and Dimming Mode Selection

The Pushbutton Universal Dimmer is capable of driving a wide range of load types. Upon power-up, the unit:

- Automatically detects the type of load connected,
- Determines the best control method to regulate the load,
- Selects the correct dimming method to suit that load (Leading or Trailing Edge Phase Angle Control).

Dynamic Auto-Ranging

The Pushbutton Universal Dimmer recognises that different loads have different capabilities. Each is able to be dimmed over a different range, and may be able to be dimmed 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.

Intelligent Ignition Sequencing

Some loads require special handling to ensure proper start-up. Most lighting loads require a traditional "Soft Start", whereas some loads may require a Kick-Start to ensure the lamp will strike. The Pushbutton Universal Dimmer is able to automatically detect the required start-up characteristics to suit the connected load type.

Soft Start: For all regular lighting loads.

Kick Start: Selected for those loads that need it (e.g. CFL).

Note that the ignition sequencing algorithm will initially "search" for the best start-up method, and some unexpected ramping effects can be observed at start-up. After three (3) successive on/off operations the dimmer will "learn" the appropriate start-up procedure. The dimmer start-up sequence will be reset after a power failure, or after the removal and replacement of (all) lamps.

Error Detection and Self-Correction The Pushbutton Universal 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 feature 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.

Power Failure Recovery The Pushbutton Universal Dimmer has on-board non-volatile memory, and is capable of storing the previous brightness settings prior to loss of power.

Short Duration Power Failure (<5 seconds):

- Automatically restores the output levels set prior to the power failure.

Longer Duration Power Failure (>5 seconds)

- Powers up in the OFF state.

8 Overload Protection Facilities

The Iconic range has a number of sophisticated protection mechanisms to reduce the risk of damage in the case of abnormal operating conditions.

Thermal Overload Protection Circuitry The Iconic range incorporates 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 switching Off (primary defence against overload). The Thermal Overload Protection resets automatically once overload conditions are corrected.

Thermal Cut-Out

The Pushbutton Universal Dimmer contains a non-resettable thermal fuse 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 dimmer 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** Whilst Iconic dimmers feature short circuit protection capabilities designed to protect the dimmer under most abnormal operating conditions. This does not ensure the dimmer can survive in every case of wiring fault, or catastrophic failure of the load.
- If activated, the short circuit protection mechanism resets automatically once the short circuit condition is removed.

9 Load Compatibility

9.1 Important Notices for Pushbutton Universal 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

RISK OF ABNORMAL OPERATION OR REDUCED PERFORMANCE

- Do not connect mixed load types to the Pushbutton Universal Dimmer. Use the 3-wire 6 A electronic switch for mixed loads or incompatible 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 Pushbutton Universal Dimmer requires a 10 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.
- When using Controllink pushbuttons for multi-way dimming of LED loads, install a 31LCDA Load Correction Device to ensure optimum performance and a stable 'off' state.

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

NOTICE

RISK OF ABNORMAL OPERATION OR REDUCED PERFORMANCE

- Use the 3-wire 6 A electronic switch for non-dimmable and motor loads.
- 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

MAXIMUM LOAD RATINGS APPLY

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

Failure to follow these instructions can result in equipment malfunction.

9.2 Load Compatibility Table

Pushbutton Universal Dimmer

Load Symbol	Compatible Loads	Dimmer
	Dimmable LED Lighting	200 W*
	Non-dimmable LED Lighting	Not Compatible
	Incandescent Lighting MV Halogen / Dichroic Lamps	300 W
	Low voltage halogen / dichroic lighting with electronic transformers	300 W
	Low voltage halogen / dichroic lighting with iron-core transformers	300 W

	Dimmable Linear Fluorescent Lamps	200 W**
	Non-dimmable Linear Fluorescent Lamps	Not Compatible
	Dimmable Compact Fluorescent Lamps	200 W***
	Non-dimmable Compact Fluorescent Lamps	Not Compatible
	Small Motors (e.g. Ceiling and Exhaust Fans)	Not Compatible
	Sensors	Not Compatible
	Contactors	Not Compatible

* Refer to clipsal.com/load for recommended Clipsal LEDs

** Selected makes/models with electronic ballast only

*** Selected makes/models only

10 Incompatible Loads

The Pushbutton Universal Dimmer described in this instruction is not compatible for use with motor/fan loads.

Exercise care when using Dimmable CFL/LED load types. Use only lamps/ballasts that are compatible with phase angle control. Refer to clipsal.com/load for recommended Clipsal LEDs – other LEDs may not be compatible with phase controlled dimmers (contact the manufacturer for compatibility advice). In case of unexpected behavior, a 31LCDA load correction device wired across the load may resolve any issues.

Refer to the manufacturer's specifications for recommendations. Warranty is void when controlling incompatible load types as determined by Schneider Electric (Australia) Pty Ltd.

11 Installation Requirements

WARNING

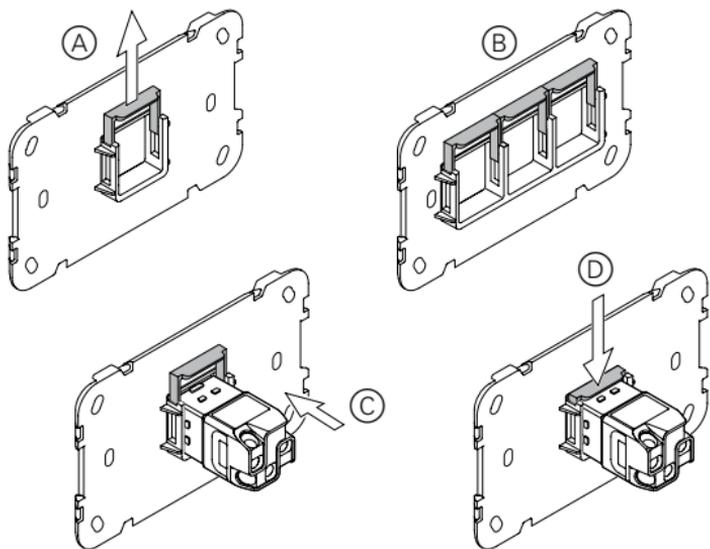
RISK OF ELECTRIC SHOCK

Hazardous voltage and electrical current may be present at the wire leads and outputs of this product even when the device is switched off or dimmer controls set to zero brightness level.

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

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

11.1 Fitting the Dimmer to the Plate

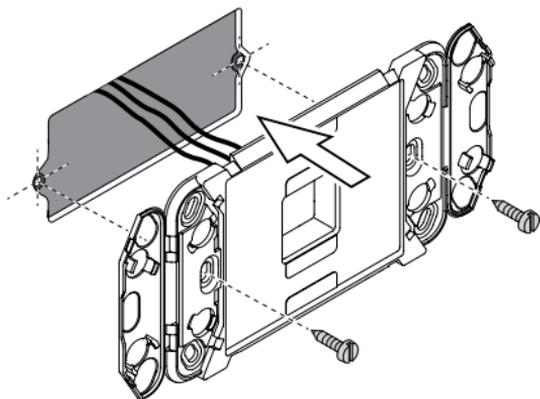


- ① On the plate, move the locking bar (A) to the Open position.

Note: On multi-gang plates, the locking bar is a single piece covering all cutouts (B).

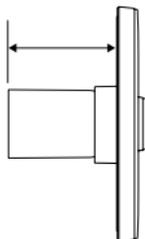
- ② Push the head of the dimmer into the plate cutout (C) until the dimmer clicks into place.
- ③ Once the dimmer mechanism is installed in the plate (or all mechanisms for multi-gang plates), move the locking bar to the Closed position (D).

11.2 Fitting the Plate

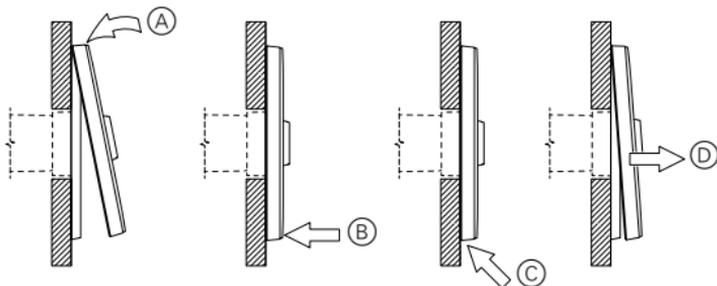


NOTICE

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



11.3 Fascia Installation and Removal



Installation

- ① Place the upper section of the fascia against the upper section of the plate, as shown in (A).
- ② Apply pressure to the bottom section of the fascia (B) so that the fascia "snaps in" to the plate.

Removal

- ① Insert the flat tip of a plastic tool into the slot located at the centre of each long edge of the fascia (C).
- ② Gently prise the fascia edge away from the plate (D) until the clips release the fascia.

12 Wiring Diagrams

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

It is illegal for persons other than an appropriately licensed electrical contractor 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 terminals of this product even when the device is switched off or dimmer controls set to zero brightness level.

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

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

NOTICE

RISK OF EQUIPMENT DAMAGE OR MALFUNCTION (WIRING CONNECTIONS)

To avoid damaging the equipment and possibly voiding the warranty:

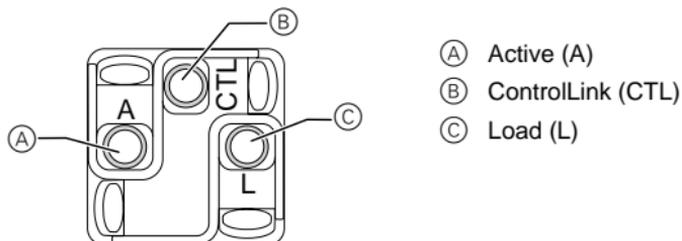
- Do not connect load terminals of multiple Primary Units in parallel.
- Do not connect a ControlLink Remote Unit directly to the load.
- Always wire Remote Units to the same circuit and phase as the Primary Unit.
- Test operation during installation and correct any wiring errors immediately.
- Keep 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.

12.1 Connection Limitations

Multiple ControlLink controlling devices can be connected to a single Primary Unit, allowing multi-way control of the load. A maximum total cable length of 30 metres is permitted.

12.2 Overview

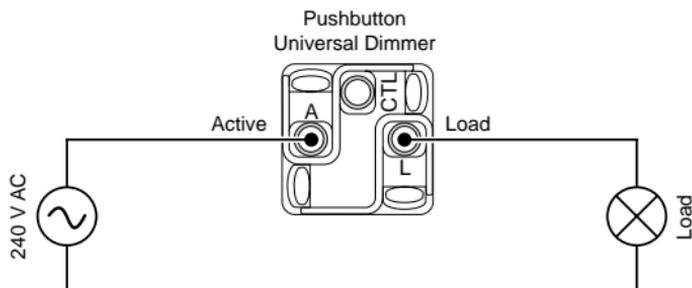


About the ControlLink Terminal

Connect the ControlLink and Active terminals of the Pushbutton Universal Dimmer to a compatible ControlLink device, such as the Iconic ControlLink Pushbutton, to achieve multi-way switching and dimming.

ControlLink recognises both short press (switch) and long press (dimmer) on the CTL terminal and operates the dimmer accordingly.

12.3 One-way Application (Switch/Dimmer)



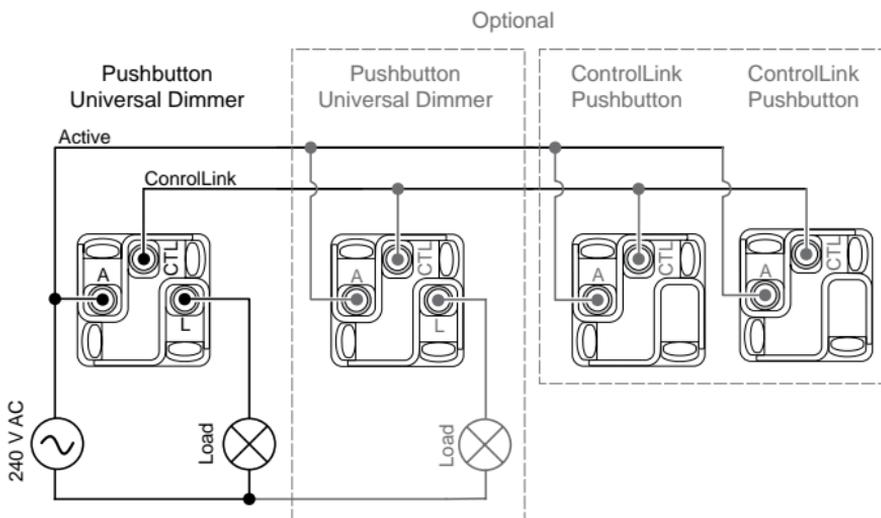
12.4 Two-way / Three-way Application (Switch/Dimmer)

1x Pushbutton Universal Dimmer

Optional, Additional:

1x Pushbutton Universal Dimmer

2x ControlLink Pushbutton



12.5 Multi-Gang Derating

For applications where Iconic Pushbutton Universal Dimmers are multi-ganged, derate the maximum load rating of each unit according to the derating table shown below.

NOTICE

The load figures shown below are based on a nominal voltage of 220-240 V AC.

Primary Mechanisms per Plate	Max. Load per Primary Mechanism (Dimmer)
1	300 W
2	300 W
3	250 W
4	200 W
5	150 W
6	100 W

NOTICE

Only Primary Units need be derated. Multi-Way Remote Units on the same plate can be ignored for the purpose of multi-gang derating.

12.6 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.

The Clipsal Iconic products have been designed to compensate for the nominal level of regular off-peak ripple signals injected onto the mains supply. However, 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 and contact the supply authority for more information about ripple signals.

13 Electrical Specifications

13.1 Electrical Specification Notes

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

13.2 Electrical Specifications

Parameter	41E300PBUD2SM-VW / PDL354PBDMUN-VW
Nominal Operating Voltage	220–240 V AC
Nominal Operating Frequency	50 Hz
Maximum Load (Dimming)	300 W
Minimum Load (Dimming)	10 W
Dimming Technique	Leading Edge / Trailing Edge Phase Control (dynamically auto-selected)

Wiring Configuration:

• Incandescent Loads	Dimmer: 300 W
• MV Halogen Loads	Dimmer: 300 W
• Electronic LV Lighting Transformers	Dimmer: 300 W
• Iron Core LV Lighting Transformers (EI and Toroidal Types)	Dimmer: 300 W
• “Dimmable” Linear Fluorescent Ballasts (Selected Make/Models Only)	Dimmer: 200 W
• Non-dimmable Linear Fluorescent Ballasts	Not Compatible
• “Dimmable” Compact Fluorescent Loads (Selected Make/Models Only)	Dimmer: 200 W
• Non-dimmable Compact Fluorescent Loads	Not Compatible
• “Dimmable” LED Lighting Drivers (Refer to clipsal.com/load for recommended Clipsal LEDs)	Dimmer: 200 W
• Non-dimmable LED Lighting Drivers	Not Compatible
• Small Motors (e.g. Ceiling and Exhaust Fans)	Not Compatible
• Sensors and Contactors	Not Compatible
Voltage / Frequency Stability	YES
Overcurrent / Overtemperature Protection	YES

Short Circuit Protection	YES
Soft-Start and Kick Start-Features	YES (Automatically selected to suit load type)
LED Indicator	Green, Halo (with Configuration Preset indication)
Multi-Way Control	YES
Multi-Gang Plate Capacity	Maximum 3 Primary Mechanisms per Plate, Combinations Allowed, Derating to be applied (refer to section 'Multi-Gang Derating')
Available Plate / Control Styles	Iconic Style, Standard and Architrave Options, Colour Packs for Pushbutton Caps and Plates: 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 Compliance	AS/NZS 60669.2.1

14 Troubleshooting

14.1 Dimming

Problem

The LED load is glowing in the Off state and/or occasionally flickering when on.

LED load is flickering when turned on from 2-way remote.

LED lights are flickering at the same time every night when dimmed.

Recommended Resolution

Iconic 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 the following remedies:

- Install a Clipsal 31LCDA load correction device across the load for improved dimming performance.

Refer to the notices in the section "Load Compatibility".

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.

Refer to the section "Off-Peak Ripple Signal Injection Considerations" for more detail.

Troubleshooting Notes

- Ensure to use Iconic 3-wire products on non-dimmable or non-lighting loads (such as motors).
- The Iconic Pushbutton Universal Dimmer is 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 for recommended loads.)
- Contact Customer Care (see last page) for further guidance if issues persist.

15 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.

CLIPSAL

by Schneider Electric

Australia

Schneider Electric (Australia) Pty Ltd

Customer Care Australia:

1300 369 233

Email:

customercare.au@schneider-electric.com

www.schneider-electric.com.au



by Schneider Electric

New Zealand

Schneider Electric (NZ) Ltd

38 Business Parade South, Highbrook,

East Tamaki, Manukau 2013

P.O. Box 259370 Botany, Manukau 2163

Telephone +64 9-829 0490

Fax +64 9-829 0491

After hours service hotline:

0800 735 4357 (New Zealand only)

Customer Care: 0800 652 999

Email: sales@nz.schneider-electric.com

www.schneider-electric.com

Schneider Electric reserves the right to change specifications, modify designs and discontinue items without incurring obligation and whilst every effort is made to ensure that descriptions, specifications and other information in this catalogue are correct, no warranty is given in respect thereof and the company shall not be liable for any error therein.

© Schneider Electric 2016

This material is copyright under Australian and international laws. Except as permitted under the relevant law, no part of this work may be reproduced by any process without prior written permission of and acknowledgement to Schneider Electric.

Schneider Electric acknowledges that the Australian Standard Certified Product logo is a trademark of SAI Global, and that the Activfire Certified logo is a trademark of CSIRO.