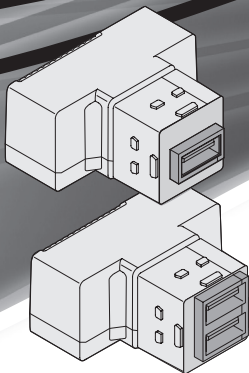


CLIPSAL[®]

by Schneider Electric



by Schneider Electric



Iconic Series

Single Port USB

Charging Mechanism (1.5 A)

40E1USBM-VW | PDL342USB-VW

Dual Port USB

Charging Mechanism (3.1 A)

40E2USBM-VW | PDL342USB2-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.
'PDL by Schneider' is a registered trademark of Schneider Electric (NZ) 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	5
2 Description	6
2.1 Locking Bar	7
2.2 USB Charging Mechanism	7
3 Features	8
4 Unit Operation	8
4.1 USB Charging Mechanism Operation	8
5 Overload Protection Facilities	9
6 Load Compatibility	10
6.1 Important Notice for USB Charging Mechanism	10
7 Installation Requirements	11
7.1 Setting the USB Port Orientation	11
7.2 Fitting the Mechanism to the Plate	12
7.3 Preparing and Fitting the Flush Box (when required)	14
7.4 Fitting the Plate	14
7.5 Fascia Installation and Removal	15
8 Wiring Diagrams	16
8.1 Overview	17
8.2 Terminal Block	17
8.3 Single Mechanism Application	18
8.4 Two-Gang Application	18
8.5 Three-Gang Application	19
9 Electrical Specifications	20
9.1 Electrical Specification Notes	20
9.2 Electrical Specifications	20
10 Troubleshooting	21
10.1 General Troubleshooting	21
10.2 Troubleshooting Notes	21
11 Warranty	22

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 of this product even when the device is switched off.

- Lock out and tag the input circuit before accessing the wiring connections.
- Use the supplied terminal block to connect the USB Charging Mechanism to the electrical circuit.
- After wiring, wrap the terminal block with insulating tape.

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.

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

EQUIPMENT DAMAGE HAZARD (LOAD)

The USB Charging Mechanism is intended for devices that are designed to be recharged via a USB port.

- Do not attempt to connect devices that are not designed to be charged via a USB port.
- Do not parallel-connect the USB ports in order to achieve higher current output. The ports are intelligent ports that communicate with devices to optimise the charge current.
- Always use the USB charging cable supplied with the device to be charged.
- There are no user serviceable parts inside the USB Charging Mechanism.

Failure to follow these instructions may result in damage to the USB Charging Mechanism and connected equipment.

2 Description

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.

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

2.1 Locking Bar

Iconic mounting plates include a new patented locking bar feature to secure the mechanism body to the mounting plate. The mechanisms are easier to remove from the plate using this new mounting technique.

2.2 USB Charging Mechanism

Iconic USB Charging Mechanisms provide a robust mechanism for wall plate USB charging applications and include advanced protection features. USB Charging Mechanisms are available in two models.

Single Port USB Charging Mechanism (1.5 A)

A compact 2-wire mechanism with one USB port, compatible with standard depth wall boxes and suitable for charging electronic devices.

Dual Port USB Charging Mechanism (3.1 A)

A 2-wire mechanism with 2 USB ports suitable for charging electronic devices such as large tablets as well as smaller devices such as smartphones and music players. Each port is capable of a maximum output of 2.1 A, with a total maximum output across both ports of 3.1 A.

Iconic USB Charging Mechanisms devices incorporate over-current and over-temperature protection and are capable of withstanding persistent short circuit conditions, making them rugged, robust and reliable.

Both USB Charging Mechanisms are capable of reducing the output current of the USB port if the internal temperature exceeds a safe level. On the Dual Port USB Charging Mechanism, this function is performed independently on each port so that over-temperature conditions on one port do not affect the output of the other.

In addition, the Iconic USB Charging Mechanisms intelligently handle the output demand of USB ports to maximise output delivery while keeping the mechanism within operating limits.

Independent USB Port Orientation

Both USB Charging Mechanisms offer the ability to set the USB port orientation independently of the mechanism body orientation. This patented feature provides installers with the flexibility to choose the most convenient mechanism / wall plate orientation for a particular installation while ensuring that the USB port(s) are presented in an orientation that is familiar to the end user.

3 Features

- Orientation of USB ports independent of mechanism body orientation
- Multi-gang capacity up to 2 Dual USB Port or 3 Single USB Port Mechanisms per plate
- USB chargers can be installed into vertical or horizontal double GPOs as well as 4 gang GPOs in the extra switch position
- Wide range of plate and USB cap colour variants available
- 1-, 2- or 3-gang wall plates available
- Complies with Australian, New Zealand and International EMC Standards

4 Unit Operation

4.1 USB Charging Mechanism Operation

Single Port USB Charging Mechanism

Power

Connect a mobile phone or similar device to the USB port on the Charging Mechanism using the USB cable supplied with the device.

The USB charging mechanism will negotiate with the device to provide optimised charging current.

Dual Port USB Charging Mechanism

Power

Connect up to two devices such as a large tablet and a mobile phone to the USB port(s) on the Charging Mechanism using the USB cables supplied with the devices.

The USB charging module will negotiate with the device to provide optimised charging current.

If two high-demand devices such as large tablets are both connected to the Dual Port USB module, the devices will negotiate with the mechanism the amount of charge current they require. As connected devices increase their charge level, the amount of current they require will decrease.

5 Overload Protection Facilities

Iconic USB Charging Mechanisms have a number of sophisticated protection mechanisms to reduce the risk of damage in the case of abnormal operating conditions.

Thermal Over-current, Over-temperature, Thermal Fuse and Short Circuit Protection

Iconic USB Charging Mechanisms incorporate three levels of over-load protection:

Thermal Over-current Protection

Automatically reduces port output current should the unit be inadvertently exposed to over-temperature conditions. On the Dual Port USB Charging Mechanism, this thermal over-current protection is applied to each port interdependently so that higher-than-normal temperature conditions on one port do not affect the output of the other port.

Extreme over-temperature will result in the unit shutting down (secondary defence against over-temperature). The Thermal Overload Protection resets automatically once over-temperature conditions are corrected.

Over-temperature Protection

Iconic USB Charging Mechanisms include over-temperature protection whereby the load is switched Off should the unit be inadvertently exposed to over-temperature conditions. The Over-temperature Protection resets automatically once over-temperature conditions are corrected.

Thermal Fuse

Iconic USB Charging Mechanisms contain a non-resettable thermal fuse device designed to blow in case of catastrophic failure. This is an extreme 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 or exposure to high ambient operating temperatures should be avoided in order to prevent permanent damage to the USB Charging Mechanism.

Short Circuit Protection

Iconic USB Charging Mechanisms feature short circuit protection capabilities designed to protect the unit under most abnormal operating conditions. This ensures that the unit 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.

6 Load Compatibility

6.1 Important Notice for USB Charging Mechanism

NOTICE

EQUIPMENT DAMAGE HAZARD (LOAD)

The USB Charging Mechanism is intended for devices that are designed to be recharged via a USB port.

- Do not attempt to connect devices that are not designed to be charged via a USB port.
- Do not parallel-connect the USB ports in order to achieve higher current output. The ports are intelligent ports that communicate with devices to optimise the charge current.
- Always use the USB charging cable supplied with the device to be charged.
- There are no user serviceable parts inside the USB Charging Mechanism.

Failure to follow these instructions may result in damage to the USB Charging Mechanism and connected equipment.

7 Installation Requirements

WARNING

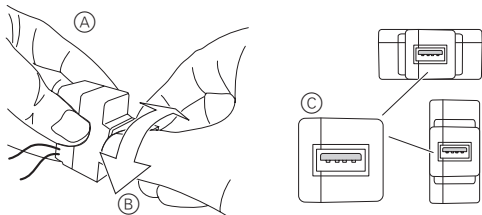
RISK OF ELECTRIC SHOCK

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

- Lock out and tag the input circuit before accessing the wiring connections.
- Use the supplied terminal block to connect the USB Charging Mechanism to the electrical circuit.
- After wiring, wrap the terminal block with insulating tape.

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

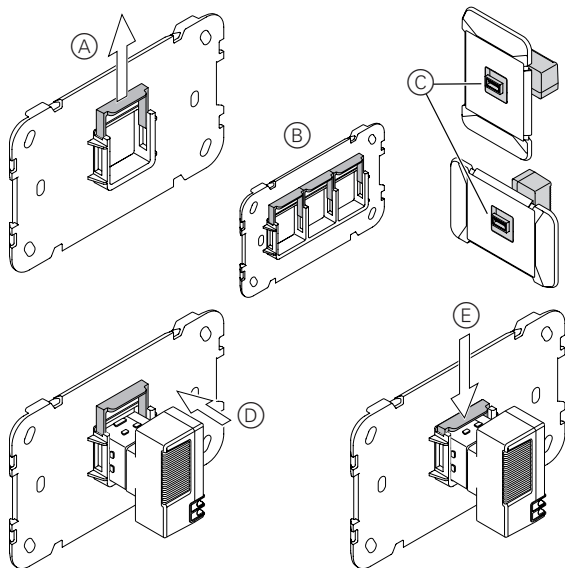
7.1 Setting the USB Port Orientation



- ① Hold the body of the USB Mechanism with one hand (A).
- ② Use your other hand to rotate the USB Port Head in either direction (B) until the Head clicks into place. The Head rotates in 90° increments.
- ③ Keep rotating the USB Port Head until you reach the desired orientation. Once installed, the USB port orientation should be as shown in (C), or as the customer requires.

7.2 Fitting the Mechanism to the Plate

Single Port USB Charging Mechanism

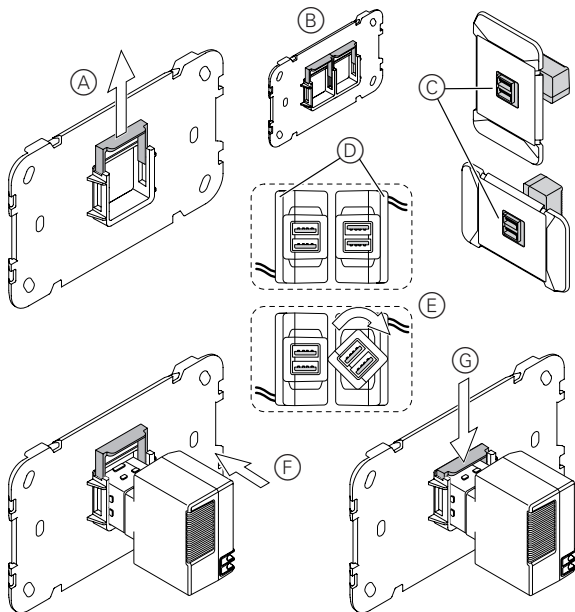


- ① On the plate, move the locking bar **A** to the Open position.

*Note: On multi-gang plates, the locking bar is a single piece covering all apertures **B**.*

- ② Match the desired orientation of the USB port to the intended orientation of the plate **C**.
- ③ Push the head of the USB Charging Mechanism into the plate aperture **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**.

Dual Port USB Charging Mechanism



Note: The Dual Port Charging Mechanism body is wider on one side than the Single Port mechanism. This restricts the multi-gang capacity for Dual Port mechanisms to 2.

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

Note: On two-gang plates, the locking bar is a single piece covering both apertures (B).

- ② Match the desired orientation of the USB port to the intended orientation of the plate (C).

Note: When multi-gangging 2 Dual Port mechanisms, each unit must be fitted with the widest part of the mechanism body to the outside (D). Rotate the head on one of the mechanisms (E) so that both ports have the same orientation.

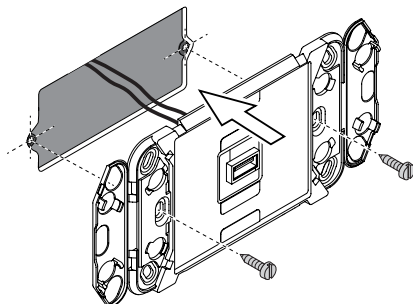
- ③ Push the head of the USB Charging Mechanism into the plate aperture (F) until the head clicks into place.
- ④ Once the mechanism is installed in the plate (or all mechanisms for multi-gang plates), move the locking bar to the Closed position (G).

7.3 Preparing and Fitting the Flush Box (when required)

When the dual port USB charging mechanism is to be fitted to certain flush boxes (New Zealand installations), there may be a need to modify the flush box to accommodate the mechanism body.

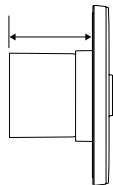
For installations that have a flush box with a back section, this back section will need to be removed to accommodate the depth of the mechanism so that the plate the mechanism is inserted into can be fixed flush to the wall.

7.4 Fitting the Plate

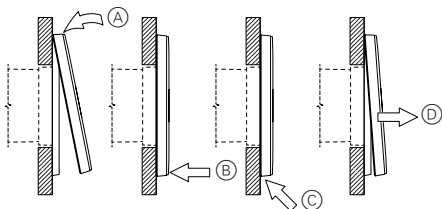


NOTICE

The Dual Port USB Mechanism requires a deep wall box. A minimum depth of 55 mm is required to accommodate the Mechanism body.



7.5 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 one of the slots located at the centre of the long edges of the fascia (C).
- ② Gently prise the fascia edge away from the plate (D) until the clips release the fascia.

8 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 wire leads of this product even when the device is switched off.

- Lock out and tag the input circuit before accessing the wiring connections.
- Use the supplied terminal block to connect the USB Charging Mechanism to the electrical circuit.
- After wiring, wrap the terminal block with insulating tape.

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.

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

NOTICE

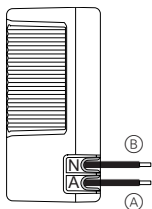
RISK OF EQUIPMENT DAMAGE OR MALFUNCTION (WIRING CONNECTIONS)

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.

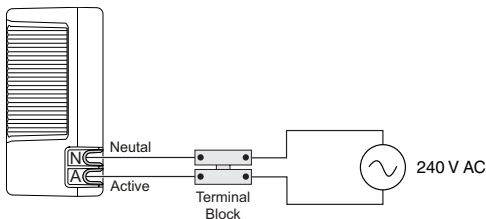
8.1 Overview



(A) Active (Red fly lead)

(B) Neutral (Black fly lead)

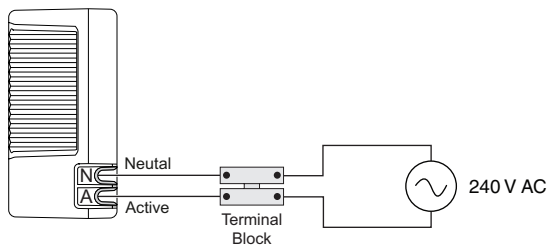
8.2 Terminal Block



Use the terminal block supplied with the USB Charger to connect the mechanism to the Mains circuit. After wiring, wrap the terminal block with insulating tape.

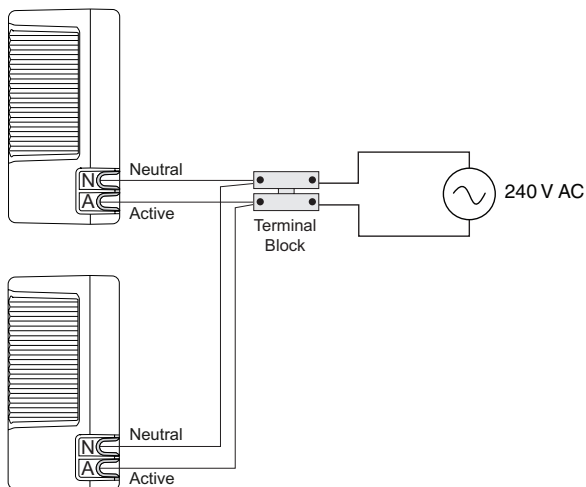
8.3 Single Mechanism Application

Single or Dual Port Mechanism



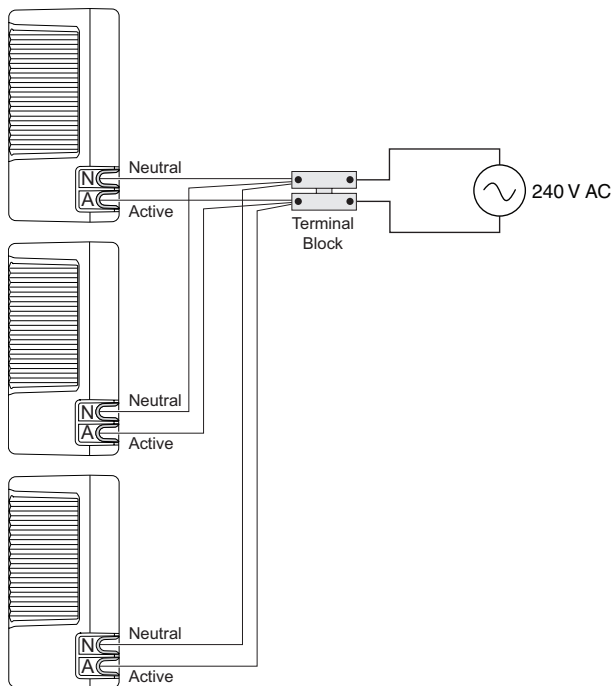
8.4 Two-Gang Application

Single and/or Dual Port Mechanisms



8.5 Three-Gang Application

Single Port Mechanisms only



9 Electrical Specifications

9.1 Electrical Specification Notes

- Specifications typical @ 240 V AC, 35 °C ambient
- Suitable for indoor use only
- No user-serviceable parts inside.

9.2 Electrical Specifications

Parameter	40E1USBM-VW PDL342USB-VW	40E2USBM-VW PDL342USB2-VW
Nominal Operating Voltage	220–240 V AC	
Nominal Operating Frequency	50 Hz	
Maximum Input Current Rating	100 mA	200 mA
Maximum Port Output	5 V DC, 1.5 A	5 V DC, 2.1 A
Maximum Unit Output	5 V DC, 1.5 A	5 V DC, 3.1 A
Short Circuit Protection	YES	
Thermal Overload Protection	YES	
Wiring Configuration	(A) Active, (N) Neutral	
Multi-Gang Plate Capacity	Maximum 3 Mechanisms per Plate	Maximum 2 Mechanisms per Plate
Available Plate / Cap Styles	Iconic Style, Standard and Architrave Options, Colour Packs for USB Port 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 61558.2.16	
EMC Compliance	AS/NZS CISPR 22, AS/NZS CISPR 24, AS/NZS 61000-3-2, AS/NZS 61000-3-3	
MEPS Standard	4665	

10 Troubleshooting

10.1 General Troubleshooting

Problem

A connected device is not charging.

Recommended Resolution

If the charging port is on a Dual Port USB Charging Mechanism, connect the device to the other charging port. If the device charges, there may be a problem with the mechanism charging port.

Connect the device to the charging port using another compatible USB cable. If the device charges, replace the faulty cable.

Connect the device to another compatible charger. If the device charges, there may be a problem with the mechanism charging port.

A large tablet (or similar high-demand device) takes an unusually long time to charge.

If the device is connected to a Single Port USB Charging Mechanism, the maximum output from the port (1.5 A) may be less than the optimal output required by the device. The device should still charge, albeit over a longer period of time.

The Iconic Dual Port USB Charging Mechanism has a higher maximum output and is better suited to charge higher-demand devices such as large tablets.

If the cable being used to connect the device to the charger is not the cable that was supplied with the device, try a genuine cable. Cheap non-reputable cables are a common source of charging issues with devices.

Two large tablets (or similar high demand devices) take longer to charge when both are connected to the Dual Port USB Charging Mechanism.

While each port on the Dual Port USB Charging Mechanism is capable of a maximum output of 2.1 A, the maximum output of the Dual Port mechanism is 3.1 A.

When two high-demand devices that are low on charge are connected to the Dual Port mechanism, the maximum output is shared between the two charging ports and each device may therefore receive less than optimum charging output.

10.2 Troubleshooting Notes

Contact Customer Care (see last page) for further guidance if issues persist.

11 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.