CLIPSAL®

by Schneider Electric

Saturn OneTouch™

60TxM

Series





Installation Instructions

REGISTERED DESIGN • REGISTERED PATENT

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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 represents 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.

Contents

1.0 For Your Safety **5**
2.0 Product Range **6**
3.0 Description **8**
4.0 Features **9**
5.0 Unit Operation **10**
6.0 Advanced Load Handling Facilities **11**
7.0 Overload Protection Facilities **13**
8.0 Setup Mode **14**
9.0 Load Compatibility **16**
9.1 Important Notices for 60TDM Dimmer 16
9.2 Load Compatibility Table 17
10.0 Incompatible Loads **18**
11.0 Installation Requirements **18**
11.1 Fitting the Grid 18
11.2 Fitting Screw Caps 19
11.3 Fascia Installation and Removal 20
11.4 Touch Calibration 20
12.0 Wiring Diagrams **21**
12.1 Connection Limitations 21
12.2 Overview 22
12.3 Jumper Settings 22
12.4 One-Way Application—Dimmer 23
12.5 One-Way Application—Switch 23
12.6 Two-Way Application—Dimmer 24
12.7 Two-Way Application—Switch 24
12.8 Three-Way Application—Dimmer 25
12.9 Three-Way Application—Switch 25
12.10 Multi-Gang Derating 26
12.11 Off-Peak Ripple Signal Injection Considerations 26
13.0 Electrical Specifications **26**
14.0 Troubleshooting **28**
15.0 Warranty **30**

1.0 For Your Safety

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

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

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

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

⚠ ⚠ WARNING

RISK OF ELECTRIC SHOCK

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

⚠ ⚠ WARNING

RISK OF ELECTRIC SHOCK

The product must be properly isolated once installed.

- To ensure isolation, screw caps MUST be fitted once the Grid is installed.

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.

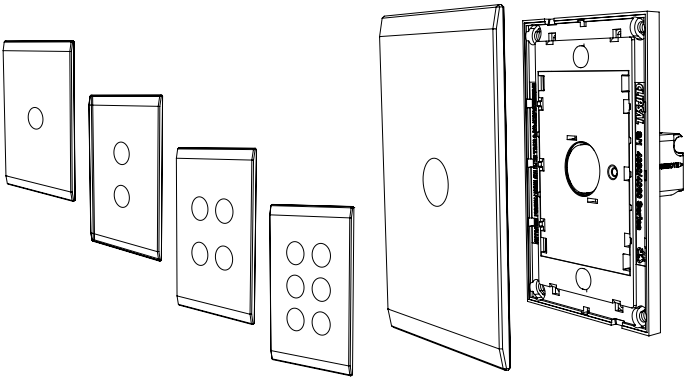
Failure to follow these instructions can result in minor injuries, or equipment damage.

2.0 Product Range

Clipsal's Saturn OneTouch is a modular range of electronic switches and dimmers incorporating advanced touch control technology with Multi-Way dimming/ switching capabilities.

The range comprises a number of 60 Series Saturn Mechanisms and Saturn Touch Plates to match. The mechanisms and plates are purchased separately to build up any combination of switches and dimmers to suit the application.

Two-gang wall plates are also available to suit a Saturn ceiling fan control switch and touch switch to allow ceiling fan speed control.



Electronic Switch

60TSRM3 Touch Switch Mech, 3-Wire, 6AX (60 Series Mech)

Universal Dimmer

60TDM Touch Dimmer Mech, 2-Wire, 350W (60 Series Mech)

Multi-Way Remote Switch/Dimmer

60TDSM Touch Dimmer/Switch Mech, 2-3 Way Remote (60 Series Mech)

The Saturn OneTouch Range Features:

- 1-3 Way Switching & Dimming Control
- Touch Sensitive Control Interface
- Cool Blue LED Indicator
- Audible Alert Tone Feedback

Available In:

- Saturn Styling: PW, OM, EB
- Standard Size: 1-6 Gang
- Architrave: 1-2 Gang
- Fan Control: 2-Gang: (1× Saturn) (1× OneTouch)

Cat No	Description	COLOUR VARIANTS		
		PW	OM	EB
Touch Mechanisms				
60TSRM3	Touch Switch Mech Primary, 3-Wire, 6AX	N/A	N/A	N/A
60TDM	Touch Uni Dimmer Mech Primary, 2-Wire, 350W	N/A	N/A	N/A
60TDSM	Touch Dimmer/Switch Mech, 2-3 Way Remote	N/A	N/A	N/A
Cover Plates – Standard				
4061TC	1-Gang Saturn OneTouch Grid and Cover	✓	✓	✓
4062TC	2-Gang Saturn OneTouch Grid and Cover	✓	✓	✓
4063TC	3-Gang Saturn OneTouch Grid and Cover	✓	✓	✓
4064TC	4-Gang Saturn OneTouch Grid and Cover	✓	✓	✓
4065TC	5-Gang Saturn OneTouch Grid and Cover	✓	✓	✓
4066TC	6-Gang Saturn OneTouch Grid and Cover	✓	✓	✓
Cover Plates – Architrave				
4061ATC	1-Gang Saturn OneTouch Grid and Cover – Architrave	✓	✓	✓
4062ATC	2-Gang Saturn OneTouch Grid and Cover – Architrave	✓	✓	✓
Cover Plates – For Ceiling Fan Switch				
4062TFC	2-Gang Saturn OneTouch Fan control Grid and Cover: • 1 gang to suit OneTouch Mech • 1 gang to suit 4060CSFM Ceiling Fan Control Switch	✓	✓	✓

Note: OneTouch mechanisms and plates are purchased separately.

3.0 Description

Saturn OneTouch is a revolutionary range of ultra-modern electronic switches and dimmers, incorporating touch control technology.

The range features a glass-like fascia, designed to complement the Clipsal Saturn™ Series. An extensive array of electromechanical switches and socket outlets are available to complete the range.

Saturn OneTouch mechanisms are available in the following configurations:



FUNCTION 	**1-WAY "PRIMARY" MECH**	**MULTI-WAY "REMOTE" MECH (2-WAY, 3-WAY)**
	Single Switching Location	Multiple Switching/ Dimming Locations
Electronic Switch (3-Wire)	60TSRM3	60TDSM
Universal Dimmer (2-Wire)	60TDM	

The Clipsal 60TxM Saturn OneTouch Series is an integrally switched, modular range including a 3-wire electronic switch (6AX), 2-wire universal dimmer (350W) and a range of wall plates, including plates for ceiling fan control switches. Units feature an intuitive touch-sensitive control interface, multi-way dimming and switching capability, cool blue halo LED indicator, and an electronically generated audible feedback tone.

Designed for universal load compatibility, Saturn OneTouch Dimmer units utilise powerful and sophisticated microcontroller-based digital universal dimming technology to provide full control of almost any type of load, 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 OneTouch electronic switch utilises robust digital 3-wire technology and an integrated relay for robust control of all load types, including motors and non-dimmable loads.

Saturn OneTouch has also 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.

Saturn OneTouch also incorporates over-current and over-temperature protection devices and is capable of withstanding persistent short circuit conditions, making it rugged, robust and reliable.

** Clipsal dimmable LED loads recommended*

4.0 Features

- Integrally switched modular electronic switch and dimmer mechanisms
- Multi-Way "Remote" wiring capability allows 1-3 way dimming and switching control
- Touch-sensitive control interface
- Cool blue LED halo indicator with subtle night light glow when light is off
- Visual and audible indicators
- Built using Clipsal's robust digital universal dimming technology
- Incorporates advanced load handling facilities
- 6AX Power Rating (3-wire Switch—suitable for all load types) / 350W Power Rating (Dimmer)
- Universal dimmer—suitable for a wide range of load types:
  - ❯ Clipsal Dimmable LED Lamps*
  - ❯ Dimmable CFL lamps
  - ❯ 240V halogen / dichroic lamps
  - ❯ Low voltage downlights using electronic transformers
  - ❯ Low voltage downlights using iron-core transformers
- Automatic soft-start / kick-start operation depending on the load type
- Automatic minimum brightness regulation depending on the load type
- Multi-gang capacity up to six (6) touch mechanisms per plate
- Easy wiring using onboard integral terminals
- Wall or architrave mounting options
- Wide range of plate colour variants available
- 2-gang wall plates for ceiling fan and lighting control solution
- Suitable for new installations or retro-fit applications
- Inbuilt over-current and over-temperature protection
- Short circuit protection
- Complies with Australian and International EMC Standards

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

5.0 Unit Operation

Touch Control Operation

ACTION	DESCRIPTION
SHORT TOUCH	Switch • Tap the touch-sensitive area to turn the load On or Off. Dimmer • Tap the touch-sensitive area to turn the load On or Off. • The dimmer has memory, and will remember the previous dim setting. When you tap the touch-sensitive area to turn the light Off, the unit will store the current setting in memory. When you tap the touch-sensitive area to turn the light On, the dimmer will restore the previous dimmer setting.
LONG TOUCH	Switch • Press and hold the touch-sensitive area to turn the load On or Off. Dimmer • Press and hold the touch-sensitive area to dim up and down. Release to stop dimming. • The dimmer will cycle up and down alternately. With a Long Touch while the light is On, the dimmer will dim down (decrease brightness) by default. With a Long Touch when the light is Off, the dimmer will dim upwards (increase brightness) by default. A subsequent Long Touch will dim in the opposite direction. • Whilst dimming, if the dimmer reaches its maximum or minimum brightness level, the unit will pause for 1.5 seconds and the LED will flash rapidly to indicate as such. After 1.5 seconds, the dimmer will start dimming in the opposite direction. • A single ramp cycle takes about 10 seconds to complete (full range, min. to max.). • If the touch-sensitive area is not pressed for 15 seconds, the dimmer is set to dim down / fade out on the next Long Touch.

Note: The Remote Unit operation will be "locked-out" one second after each "on" operation while the load responds to commands. During this time the unit will sound the alert tone if pressed, but the load will not respond further.

LED Indicator

Saturn OneTouch units incorporate a Cool Blue Halo LED Indicator. The indicator is permanently ON. When a touch command is registered the LED will momentarily glow brightly before returning to a night light / power saver mode.

Additional LED Functions - Dimmer Only	
FAST FLASHING (×5)	• During dimming, the LED will flash rapidly 5 times to signify that the unit has reached minimum or maximum brightness.
SLOW FLASHING	• For some load types the unit has a special start-up routine. The LED will flash for several seconds to indicate that the start-up sequence is in progress. The unit will not respond to commands during this time.

Audible Alert Tone

Saturn OneTouch features an electronically generated audible feedback tone. The tone will sound when a touch command is successfully registered.

6.0 Advanced Load Handling Facilities

Saturn OneTouch incorporates Clipsal's patented universal dimming technology, including advanced, intelligent features to ensure that the connected load is handled appropriately.

FEATURE	DESCRIPTION
Automatic Load Detection and Dimming Mode Selection	The Saturn OneTouch 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 Saturn OneTouch Universal Dimmer recognises that different loads have different capabilities. Each is able to dim over a different range, and may be able to dim over a wider range as the lamp warms up. The Dimmer: • Determines the maximum brightness setting • Determines the minimum brightness setting • Dynamically validates and adjusts the minimum brightness setting during operation to enable stable operation at lower levels as the lamp warms up. Note that initially the minimum brightness will be set to a "safe" level to ensure stable operation. After a short time when the lamps warm up, depending on the load type, it may be possible to dim to a lower setting.

<table>
<tr><th>FEATURE</th><th>DESCRIPTION</th></tr>
<tr><td>Intelligent Ignition Sequencing</td><td>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 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.</td></tr>
<tr><td>Error Detection and Self-Correction</td><td>The Saturn OneTouch 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 facility is useful, it does not guarantee flawless operation. Such performance is a function of the design/construction of the lamp and may vary between lamp manufacturers. For LED loads, it is recommended to use Clipsal lamps—Clipsal LED loads are recommended for optimium performance and reliability.</td></tr>
<tr><td>Power Failure Recovery</td><td>The Saturn OneTouch Universal Dimmer has on-board non-volatile memory, and is capable of storing the previous brightness settings prior to loss of power.
<table>
<tr><th>Power Loss Duration</th><th>Power Failure Recovery Status</th></tr>
<tr><td>Short Duration Power Failure (<5 seconds)</td><td>Automatically restores the output levels set prior to the power failure.</td></tr>
<tr><td>Longer Duration Power Failure (>5 seconds)</td><td>Powers up in the OFF state.</td></tr>
</table></td></tr>
</table>

7.0 Overload Protection Facilities

Saturn OneTouch has a number of sophisticated protection mechanisms to reduce the risk of damage in the case of abnormal operating conditions.

FEATURE	DESCRIPTION
Thermal Overload Protection Circuitry	Saturn OneTouch 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 turning Off (primary defence against overload). The Thermal Overload Protection resets automatically once overload conditions are corrected. Thermal Cut-Out The unit contains a non-resettable thermal fuse device designed to blow in case of catastrophic circuit failure. This is a secondary protection measure intended to operate as a backup in case of persistent or prolonged overload conditions. If the thermal cut-out fuse blows, the 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	Short Circuit Protection Saturn OneTouch features short circuit protection capabilities, designed to protect the dimmer under most abnormal operating conditions. This ensures the dimmer can survive in case of wiring fault, or catastrophic failure of the load. The short circuit protection mechanism resets automatically once the short circuit condition is removed.

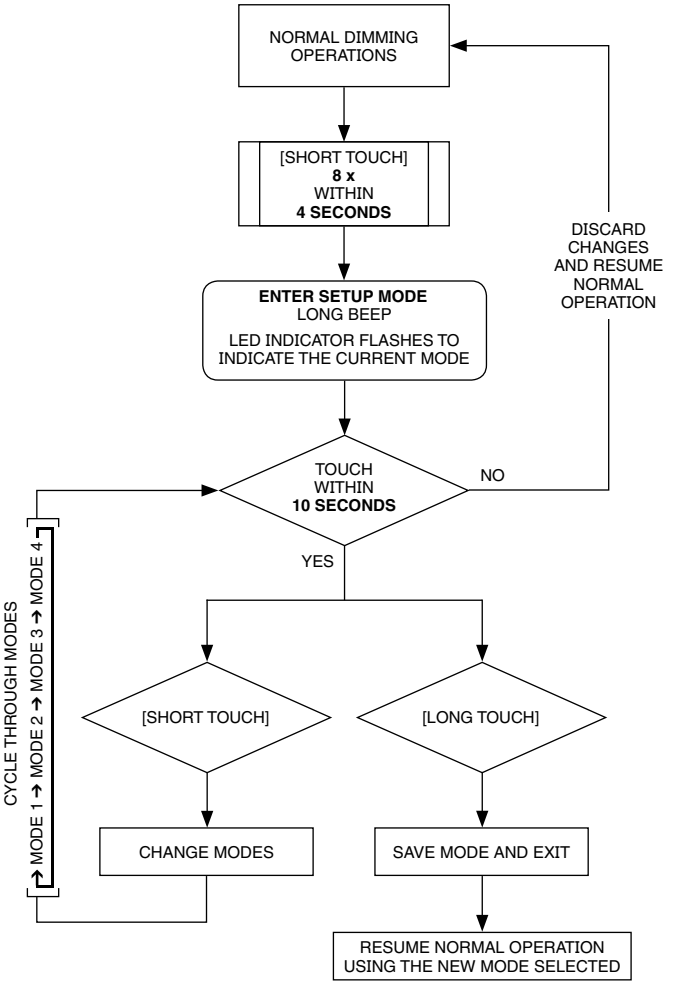
8.0 Setup Mode

OneTouch Dimmer

Saturn OneTouch Dimmer Mechanisms incorporate intelligent load type detection facilities and automatically select the dimming mode appropriate for the detected load type. From time-to-time some difficult loads may not be detected correctly. In this case the user can manually set the dimming mode for optimum compatibility performance using “Setup Mode”.*

MODE	DESCRIPTION
MODE 1:	AUTO Mode: (Default) AUTO Mode will suit most connected load types. In AUTO Mode, the unit will select the appropriate dimming parameters automatically. • Automatically detects the connected load type and sets the optimum dimming method to suit the detected load type • Selects appropriate Start-Up method (Soft-Start for normal loads, Kick-Start to strike Dimmable CFL loads) • Dynamic Auto-Ranging activated
MODE 2:	KICK-START Mode: Some dimmable energy-efficient loads (e.g. CFL) require special handling. In this mode, a forced Kick-Start is initiated to ensure they will strike successfully and some provision is made to reduce the probability of Lamp Drop-Out at low brightness. • Sets Trailing Edge Dimming Mode • Selects Kick-Start Start-Up Sequence • Lamp Drop-Out Detection Facility enabled • Dynamic Auto-Ranging disabled
MODE 3:	SIMPLE Mode: SIMPLE Mode disables all intelligent features of the dimmer, enabling conventional dimming to occur. • Automatically detects the connected load type and sets the optimum dimming method to suit the detected load type • Selects Soft-Start Start-Up Sequence • Dynamic Auto-Ranging disabled
MODE 4:	SWITCH Mode: • When required, the Touch Dimmer unit can be configured to operate as a Switch. All normal dimming functions are disabled in this mode, and the unit simply turns the load On and Off.

** Note: Setup Mode is only available for Touch Dimmer Units. Setup Mode is not applicable for Touch Switch Units.*


NORMAL DIMMING OPERATIONS
[SHORT TOUCH]
8 x
WITHIN
4 SECONDS
DISCARD CHANGES AND RESUME NORMAL OPERATION
ENTER SETUP MODE
LONG BEEP
LED INDICATOR FLASHES TO INDICATE THE CURRENT MODE
TOUCH WITHIN **10 SECONDS**
NO
YES
CYCLE THROUGH MODES
MODE 1 → MODE 2 → MODE 3 → MODE 4
[SHORT TOUCH]
[LONG TOUCH]
CHANGE MODES
SAVE MODE AND EXIT
RESUME NORMAL OPERATION USING THE NEW MODE SELECTED

9.0 Load Compatibility

9.1 Important Notices for 60TDM Dimmer

NOTICE

EQUIPMENT DAMAGE HAZARD (LOAD AND OPERATION)

Operation at elevated temperatures or voltages outside of specification (240V~ 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 OneTouch Dimmer. Use the 3-wire electronic switch for mixed loads.
- When using electronic transformers, load each transformer to at least 75% of its maximum rated load to reduce the possibility of lamp flicker when dimming. Refer to the manufacturer's specifications for the transformer being used.
- The OneTouch Dimmer has a 10W 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 remote units for 2-3 way dimming of LED loads, install a 31LCDA Load Correction Device to ensure optimum performance and a stable 'off' state. (When using Clipsal LEDs, a 31LCDA is only required for 3-way dimming.)
- Use the 3-wire 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 OneTouch 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

LOAD SYMBOL	COMPATIBLE LOADS	60TSRM3 Switch	60TDM Dimmer
	Dimmable LED Lighting	6A	200W *
	Non-dimmable LED Lighting	6A	Not Compatible
	Incandescent Lighting MV Halogen / Dichroic Lamps	6A	350W
	Low voltage halogen / dichroic lighting with electronic transformers	6A	350W
	Low voltage halogen / dichroic lighting with iron-core transformers	6A	350W
	Dimmable Linear Fluorescent Lamps	6A	200W **
	Non-dimmable Linear Fluorescent Lamps	6A	Not Compatible
	Dimmable Compact Fluorescent Lamps	6A	200W ***
	Non-dimmable Compact Fluorescent Lamps	6A	Not Compatible
	Small Motors (e.g. Ceiling and Exhaust Fans)	1A (M6)	Not Compatible
	Sensors	6A	Not Compatible
	Contactors	6A	Not Compatible

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

** *Selected makes/models with electronic ballast only*

*** *Selected makes/models only*

10.0 Incompatible Loads

The Saturn 3-wire switch is compatible with all load types, as described in Section 9.0 Load Compatibility. Use the 3-wire switch for non-dimmable loads.

Saturn OneTouch Dimmer mechanisms described in this instruction are not compatible for use with motor/fan loads. Use the OneTouch 3-wire switch for motor 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.

11.0 Installation Requirements

11.1 Fitting the Grid

⚠⚠ 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.

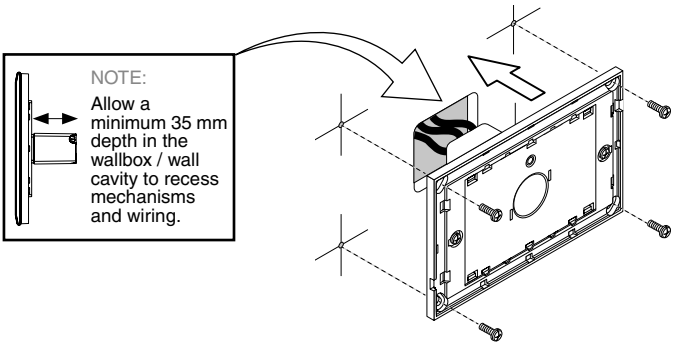
NOTICE

RISK OF EQUIPMENT MALFUNCTION (GRID INSTALLATION)

Fascia must be fitted flush to Grid plate.

- Ensure that there is enough room to accommodate the switch wiring in the wall cavity behind the Grid. Avoid excess pressure on the Grid once installed.
- Check that the Grid is flush to the wall and not bowed prior to, or after, installing the Grid screws.
- Do not overtighten Grid screws when installing.

Failure to follow these instructions can result in equipment malfunction.



11.2 Fitting Screw Caps

⚠ ⚠ WARNING

RISK OF ELECTRIC SHOCK

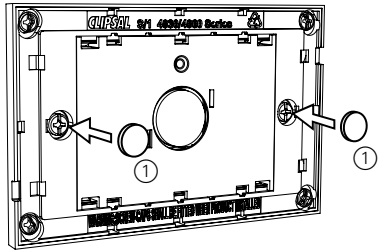
The product must be properly isolated once installed.

- To ensure isolation, screw caps MUST be fitted once the Grid is installed.

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

① Once the Grid is installed, fit screw caps to ensure proper isolation.

Note: Ensure Grid and fascia is fitted flush to the wall to ensure proper Touch function.

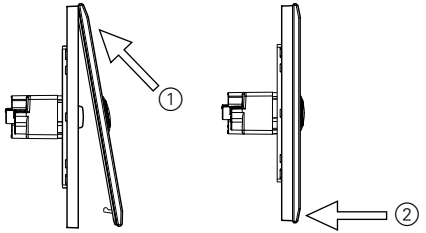


11.3 Fascia Installation and Removal

Installation

① Insert top fascia clips into the appropriate grid location.

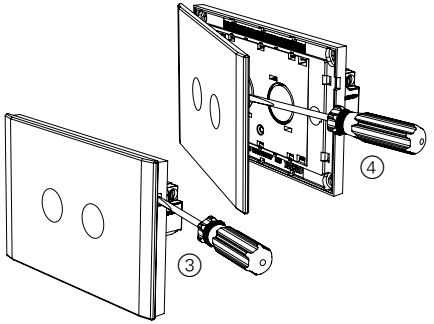
② Once inserted, “snap-in” the bottom of the fascia.



Removal

③ Locate screwdriver slot on the edge of the product. Insert a flat blade screwdriver into the slot.

④ Using a levering action, remove the front fascia.



11.4 Touch Calibration

Saturn OneTouch incorporates a self-calibrating touch-sensitive integrated circuit. The unit will regularly re-calibrate itself to ensure correct touch registration.

During installation of the fascia, the product will also re-calibrate itself. When the fascia is clicked into place, it will register and recognise a Long Touch operation:

- A Saturn OneTouch Dimmer unit will dim the load up and down accordingly.
- A Saturn OneTouch Switch unit will turn the lights on and off.

The unit will not respond to commands during this time.

Touch Calibration Procedure

Note: The fascia must be installed flush in order to ensure proper calibration and function.

- PRIMARY Unit: Press and hold for 5 seconds to store calibration settings and resume normal operation.
- REMOTE Unit: As above for Primary Unit. Alternatively, the unit will automatically calibrate after 20 seconds and resume normal operation.

12.0 Wiring Diagrams

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

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

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

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

⚠⚠ WARNING

RISK OF ELECTRIC SHOCK

Hazardous voltage and electrical current may be present at the wire leads and outputs of this product even when the device is switched off 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 multiple Primary Units in parallel, or connect one Primary Unit to another Primary Unit—use Remote Units for Multi-Way control.
- Do not connect a Remote Unit 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.
- Ensure that Jumper Settings are correct before operation.
- 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

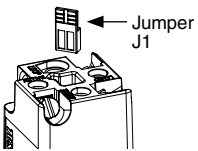
A maximum of TWO Multi-Way Remote Units can be connected to a single Primary Unit, allowing up to 3-Way control of the load. A maximum total cable length of 30 metres is permitted.

12.2 Overview

FUNCTION 	**1-WAY "PRIMARY" DIMMER MECH**	**1-WAY "PRIMARY" SWITCH MECH**	**MULTI-WAY "REMOTE" MECH (2-WAY, 3-WAY)**
	Single Switching Location		Multiple Switching Locations
Model	60TDM	60TSRM3	60TDSM
Terminal Arrangements	 ACTIVE REMOTE LOAD LOOP	 ACTIVE NEUTRAL LOAD REMOTE	 ACTIVE REMOTE LOOP LOOP
Jumper J1	ON: One-Way Application OFF: Multi-Way Application		Always OFF (Jumper not supplied with product)

12.3 Jumper Settings

Saturn OneTouch Mechanisms have a Jumper Setting (J1), which must be set for correct operation.



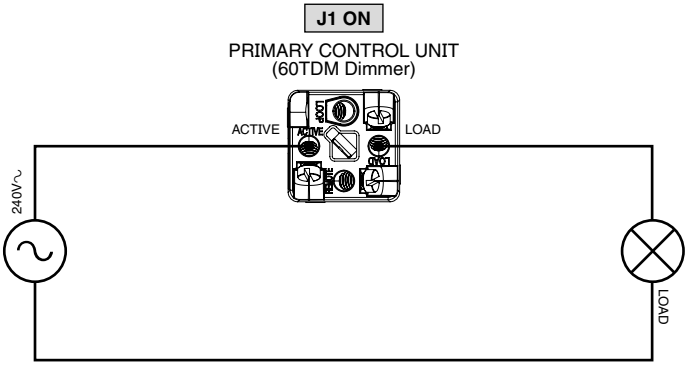
JUMPER SETTINGS	**1-Way Application**	**2-Way Application**	**3-Way Application**
PRIMARY UNIT	ON	OFF	OFF
REMOTE #1	N/A	OFF	OFF
REMOTE #2	N/A	N/A	OFF

Remove Jumper J1 from the Primary Unit for all Multi-Way applications.

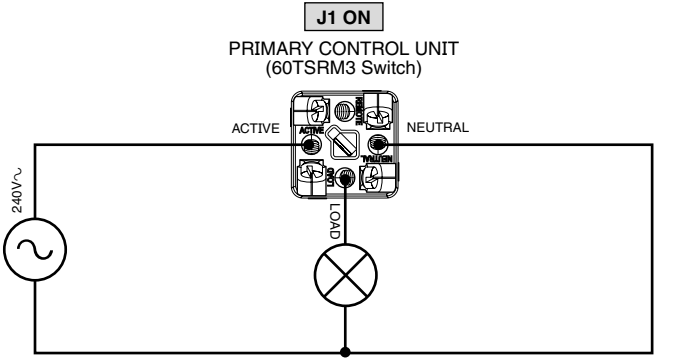
REMEMBER:

On initial installation, and installation of plate fascia, the unit will self-calibrate. See Section 11.4 Touch Calibration for more information.

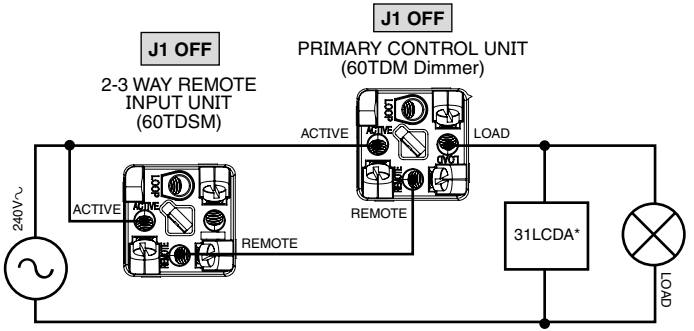
12.4 One-Way Application—Dimmer



12.5 One-Way Application—Switch



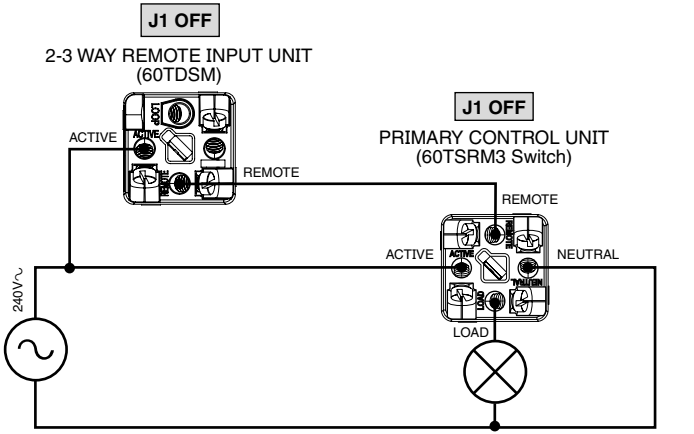
12.6 Two-Way Application—Dimmer



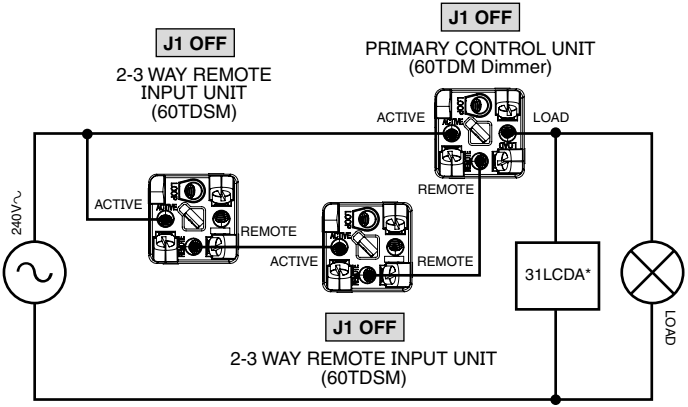
* When using non-Clipsal energy efficient loads such as dimmable CFL/LEDs in a two-way application, it is recommended that you install a 31LCDA Load Correction Device (as shown above).

Note: The 60TDSM Remote Unit is suitable for dimming and switching control.

12.7 Two-Way Application—Switch

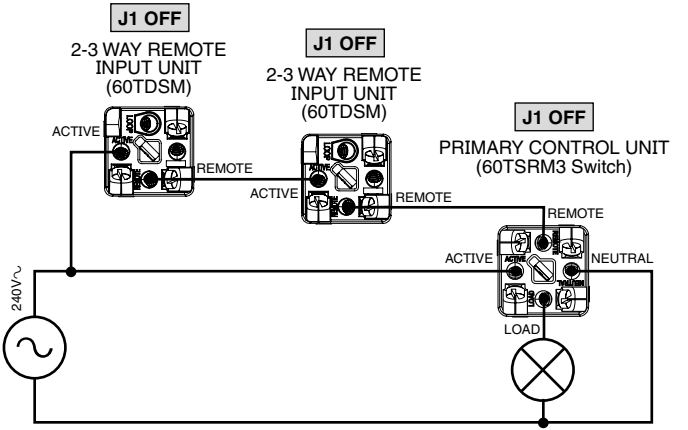


12.8 Three-Way Application—Dimmer



* **IMPORTANT:** When using energy efficient loads such as dimmable CFL/LEDs in a three-way application, you must install a 31LCDA Load Correction Device.

12.9 Three-Way Application—Switch



12.10 Multi-Gang Derating

For applications where Saturn OneTouch units are multi-ganged, derate the maximum load rating of each unit according to the derating table shown below.

Number of Primary Mechanisms per Grid Plate	Maximum Load per Primary Mechanism	
	Nominal Voltage 220-240V∿	
	60TSRM3 SWITCH	60TDM DIMMER
1	6A	350W
2	6A	300W
3	6A	250W
4	4A	200W
5	4A	150W
6	4A	100W

Multi-Gang Derating Table

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

12.11 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 OneTouch 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.

13.0 Electrical Specifications

Electrical Specification Notes:

- Specifications typical @ 240V∿ 25 °C
- Suitable for Indoor Use Only
- No User Serviceable Parts Inside.

Electrical Specifications Table

- See next page.

Parameter	60TSRM3 SWITCH	60TDM DIMMER
Nominal Operating Voltage	220 – 240V~	
Nominal Operating Frequency	50Hz	
Maximum Load	6A	350W
	Derate for multi-gang applications (refer table on page 26)	
Minimum Load	N/A	10W (Use 31LCDA if required)
Dimming/Switching Technique	Relay	Leading Edge / Trailing Edge Phase Control (dynamically auto-selected)
Wiring Configuration	3-wire (Switch)	2-wire (Dimmer)
• Incandescent Loads	6A	350W
• MV Halogen Loads	6A	350W
• Electronic LV Lighting Transformers	6A	350W
• Iron Core LV Lighting Transformers (EI and Toroidal Types)	6A	350W
• "Dimmable" Linear Fluorescent Ballasts (Selected Make/Models Only)	6A	200W
• Non-dimmable Linear Fluorescent Ballasts	6A	Not Compatible
• "Dimmable" Compact Fluorescent Loads (Selected Make/Models Only)	6A	200W
• Non-dimmable Compact Fluorescent Loads (Selected Make/Models Only)	6A	Not Compatible
• “Dimmable” LED Lighting Drivers (Refer to clipsal.com/load for recommended Clipsal LEDs)	6A	200W
• Non-dimmable LED Lighting Drivers	6A	Not Compatible
• Small Motors (e.g. Ceiling and Exhaust Fans)	1A (M6)	Not Compatible
• Sensors and Contactors	6A	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	Cool Blue, Halo (Including “Nightlight" Illumination Level)	
Audible Indicator	Electronic Tone Generation	
Multi-Way Control	YES (1, 2, 3-Way Control)	
Multi-Gang Grid Capacity	Maximum Six (6) Primary Mechanisms Per Plate, Combinations Allowed, Derating to be applied (Refer details on page 26)	
Available Plate / Control Styles	Saturn Style, Standard & Architrave Options Ocean Mist (OM), Espresso Black (EB), Pure White (PW)	
Mounting Centres	84 mm Australian Pattern Plate	
Safety Compliances	AS/NZS 3133	AS/NZS 60669-2-1
EMC Emission Compliance	AS/NZS CISPR15 (Except when used in conjunction with electronic loads)	IEC60669-2-1 (Except when used in conjunction with electronic loads)

14.0 Troubleshooting

Problem	Recommended Resolution
Dimming	
The LED load is glowing in the Off state and/or occasionally flickering when on.	OneTouch 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. • If dimming is not required, install a OneTouch 3-wire electronic switch (60TSRM3).
LED load is flickering when turned on from 2-way remote.	• Refer to the notices in Section 9.0 Load Compatibility. • If dimming is not required, install a OneTouch 3-wire electronic switch (60TSRM3).
LED lights are flickering at the same time every night when dimmed.	• This may be caused by increased/amplified off-peak ripple signals on the mains supply. • Improvements may come from operating the dimmer at increased brightness. If problems continue, install a OneTouch 3-wire Switch. • Refer to Section 12.11 Off-Peak Ripple Signal Injection Considerations for more detail.
General	
Switch is not working (does not turn on).	• Ensure the fascia plate is fitted flush to the grid plate. (Check that there is no air gap between the black grid plate and the OneTouch fascia plate.) • Ensure the grid plate is installed flat to the wall (not bowed). • Avoid forcing wiring behind plate and over-tightening mounting screws. • Once confirmed that the grid plate and fascia is fitted correctly, cycle power to the unit. The unit will self re-calibrate for normal operation. • Refer to Section 11.0 Installation Requirements for more details.
Lights turn on randomly with no switch operation.	• Refer to “Switch is not working” above.
Multi-Way Remote Unit is not responding and indicator is not working.	• Check that Jumper J1 on the Primary Unit is removed.

Troubleshooting Notes:

- Ensure to use the OneTouch 3-wire electronic switch on non-dimmable or non-lighting loads (such as motors).
- The OneTouch 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 Section 9.0 Load Compatibility and clipsal.com/load for recommended loads.)
- Contact Customer Care (see last page) for further guidance if issues persist.

15.0 Warranty

The benefits conferred herein are in addition to, and in no way shall be deemed to derogate; either expressly or by implication, any or all other rights and remedies in respect to the Schneider Electric product, which the consumer has in the location where the product is sold.

The warrantor is Schneider Electric with offices worldwide. This Schneider Electric product is guaranteed against faulty workmanship and materials for a period of two (2) years from the date of installation.

Schneider Electric reserves the right, at its discretion, to either repair free of parts and labour charges, replace or offer refund in respect to any article found to be faulty due to materials, parts or workmanship.

This warranty is expressly subject to the Schneider Electric product being installed, wired, tested, operated and used in accordance with the manufacturer's instructions. Any alterations or modifications made to the product without permission of Schneider Electric might void the warranty.

Schneider Electric shall meet all costs of a claim. However, should the product that is the subject of the claim be found to be in good working order, all such costs shall be met by the claimant.

When making a claim, the consumer shall forward the Schneider Electric product to the nearest Schneider Electric office and provide adequate particulars of the defect within 28 days of the fault occurring. The product should be returned securely packed, complete with details of the date and place of purchase, description of load, and circumstances of malfunction.

Schneider Electric (Australia) Pty Ltd

clipsal.com

Contact us: clipsal.com/feedback

National Customer Care Enquiries:

Tel 1300 2025 25

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