DIGINET
CONTROL SYSTEMS

LEDsmart⁺ RANGE
DIMMERS, TIMERS & SWITCHES
TECHNICAL GUIDE

Single & multi-way control
without extra wires or control systems

DIGINET
CONTROL SYSTEMS

The simple solution to multi-way control

Diginet LEDsmart+™ is the first range of dimmers, switches and timers to use new patented MultiMate™ technology that allows multiple dimmers to be connected in parallel.

Diginet LEDsmart+™ delivers a simple solution for single and multi-way control with:

- NO additional wiring
- NO expensive control systems needed

Although optimised for LED lighting loads, LEDsmart+™ also provides excellent compatibility with other common lamps types such as incandescent lamps, 12V halogen lamps and dimmable CFLs.

This technical guide will show you how easy and simple it is to install LEDsmart+™ products powered by MultiMate™ technology.

MultiMate™ Technology — making the impossible possible

Diginet LEDsmart⁺™ Dimmers, Timers and Switches are powered by MultiMate™, a revolutionary new technology developed right here in Australia that allows multi-way control of lighting without the need for an expensive control system.

Powered by
MultiMate
TECHNOLOGY

MULTI-WAY DIMMING AND SWITCHING WITH NO ADDITIONAL WIRING

MultiMate™ technology enables multiple LEDsmart⁺™ two-wire devices to be wired in parallel to the same lighting load, to provide two-way, three-way or multi-way dimming and switching. When connected in parallel LEDsmart⁺™ dimmers allow dimming (and switching) of connected lighting loads from multiple locations without any additional wiring. No dedicated remote switch wiring or 'control bus' is required.
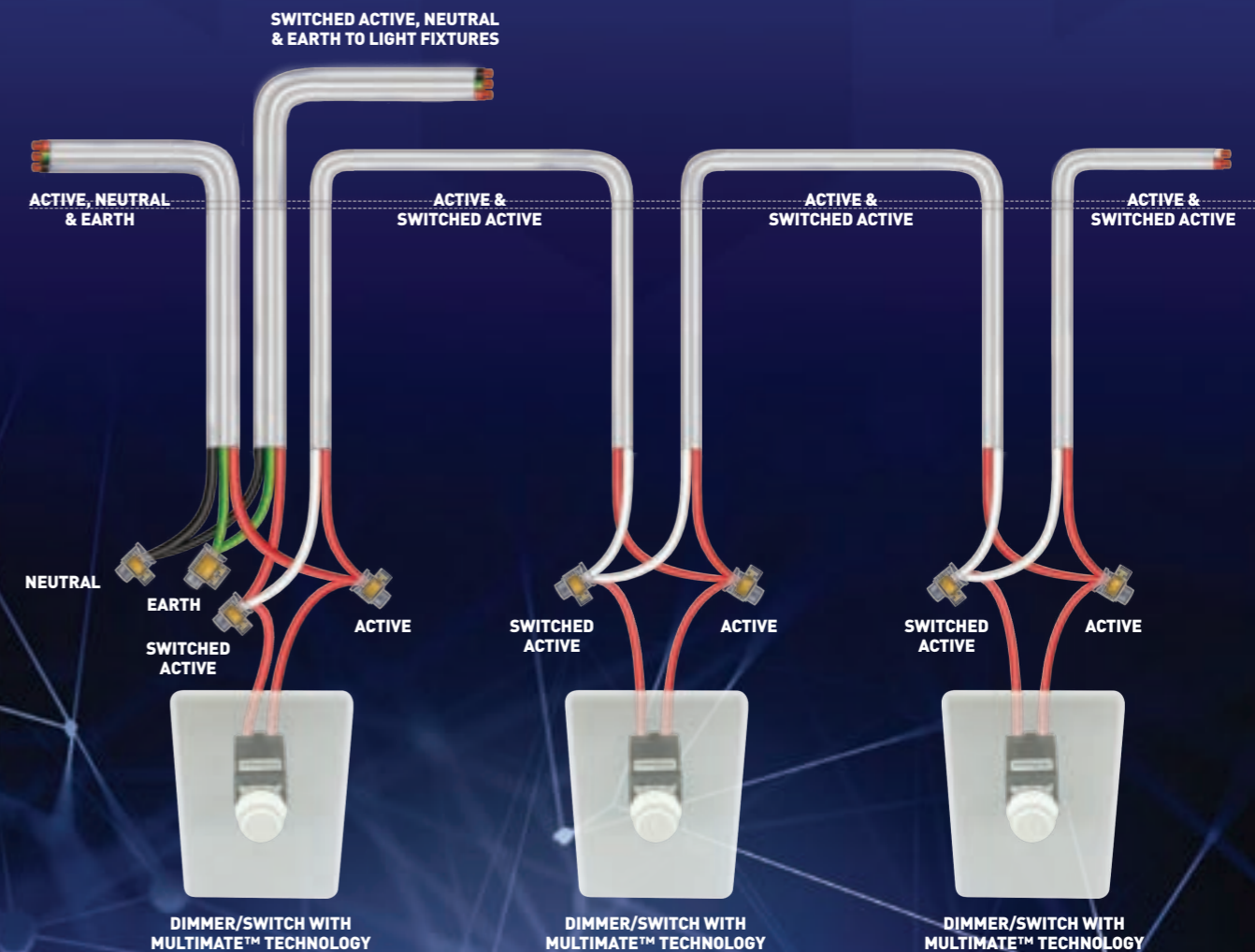
PERFECT FOR NEW INSTALLATIONS OR RETROFITS

With the ability to leverage existing wiring, dimmers and switches powered by MultiMate™ technology are suitable for new installations and retrofits.

MultiMate™ is a patented technology, developed right here in Australia by Diginet Control Systems — part of the Gerard Lighting group.

TYPICAL WIRING FOR MULTI-WAY CONTROL USING PRODUCTS WITH MULTIMATE™ TECHNOLOGY

With MultiMate™ technology, multiple two-wire devices are simply wired in parallel, to provide two-way, three-way or multi-way dimming and switching.

SWITCHED ACTIVE, NEUTRAL & EARTH TO LIGHT FIXTURES

ACTIVE, NEUTRAL & EARTH

ACTIVE & SWITCHED ACTIVE

ACTIVE & SWITCHED ACTIVE

ACTIVE & SWITCHED ACTIVE

NEUTRAL

EARTH

ACTIVE

SWITCHED ACTIVE

SWITCHED ACTIVE

ACTIVE

SWITCHED ACTIVE

ACTIVE

DIMMER/SWITCH WITH MULTIMATE™ TECHNOLOGY

DIMMER/SWITCH WITH MULTIMATE™ TECHNOLOGY

DIMMER/SWITCH WITH MULTIMATE™ TECHNOLOGY

LEDsmart⁺™ product range

Diginet LEDsmart⁺™ offers an extensive product range of dimmers, switches and timers powered by MultiMate™ technology, which provide single and multi-way dimming and switching without extra wiring or control systems.

DIGITAL ROTARY DIMMER/SWITCH

WITH BUILT IN ON/OFF SWITCH & MULTI-WAY CONTROL
- Digital rotary dial for smooth and easy dimming
- Built-in tap on/off switch
- Fully programmable functions
- 'Quick flick' dial feature to go to maximum or minimum lighting
- Double tap to dim to minimum or maximum over 30 minutes
- Illuminated halo via white LED indicators
- Large and small rotary dial options
- Interchangeable coloured halo rings (clear/blue/green/orange)

PUSH BUTTON SWITCH

WITH BUILT IN ON/OFF SWITCH AND MULTI-WAY CONTROL
- Push and hold to dim up/down
- Built-in tap on/off switch
- Fully programmable functions
- Double tap to dim to minimum or maximum over 30 minutes
- Illuminated bezel via white LED indicators
- Flat and rocker style button options
- Interchangeable coloured bezels (clear/blue/green/orange)

PUSH BUTTON DIMMER/SWITCH

FOR LED LIGHTING WITH BUILT IN MULTI-WAY CONTROL
- Tap on/off light switch
- Fully programmable functions
- Quiet, soft press button — no harsh click
- White LED-illuminated bezel
- Optional soft start switch on
- Flat and rocker style button options
- Simple 3-step programming
- Interchangeable coloured bezels (clear/blue/green/orange)

PUSH BUTTON MINUTE TIMER

WITH BUILT IN MULTI-WAY CONTROL
- Programmable between 1 minute and 30 minutes, in 1-minute steps
- Simple 3-step timer interval setting
- Override function to prevent lighting turning off automatically
- Advanced warning option dims to 50% for 5 minutes after time out
- Programmable maximum level and off state indicator
- White LED-illuminated bezel
- Flat and rocker style button options
- Interchangeable coloured bezels (clear/blue/green/orange)

PUSH BUTTON HOUR TIMER

WITH BUILT IN MULTI-WAY CONTROL
- Programmable between ¼ hour and 7½ hours, in ¼-hour steps
- Simple 3-step timer interval setting
- Override function to prevent lighting turning off automatically
- Advanced warning option dims to 50% for 5 minutes after time out
- Programmable maximum level and off state indicator
- White LED-illuminated bezel
- Flat and rocker style button options
- Interchangeable coloured bezels (clear/blue/green/orange)

DIGITAL LEVEL DISPLAY*

DIMMER IS NOT INCLUDED WITH THIS PRODUCT
A SUITABLE DIMMER MUST BE PURCHASED SEPARATELY
- Works in conjunction with 2-wire dimmers and some 3-wire dimmers and is connected in parallel with a dimmer
- 2-wire device – connects to Active and Load, no Neutral connection required
- Compatible with Diginet MultiMate™ enabled products, such as LEDsmart⁺ dimmers and Sitara™ Bluetooth® Dimmers
- Working conduction angle range 1ms to 8ms
- Soft transition between adjacent indicator LED's
- Includes alternative light pipes to change the LED indicator display colour from white to orange, green or blue
- Plain white front face or alternative front face with light globe icon
- Fits standard Australian wall plate apertures

*For more details, please refer to DIGINET LEDSmart+™ Digital Level Display trade brochure

ROTARY DISC AND WALL MOUNTING KIT**

ELEGANT INTERFACE FOR LEDsmart⁺ ROTARY DIMMERS
- Only the 56mm Rotary Disc is visible on the wall – no additional wall plate required
- Provides an interface for both rotary dimming and push on/off control (via a Diginet LEDsmart+ Rotary Dimmer with integrated on/off switch)
- Choice of two Rotary Discs included – white and white/faux glass
- 'Adaptor Base' included allowing 3rd party designed and manufactured Rotary Discs to be used (refer to installation guide)

**For more details, please refer to DIGINET LEDSmart+™ Rotary disc and circular mounting kit trade brochure

Traditional lighting control set-up versus LEDsmart+™

SWITCH

SWITCH

DIMMER & SWITCH

DIMMER & SWITCH

DIMMER & SWITCH

DIMMER & SWITCH

Before

To dim the lighting, the homeowner has to get out of bed and use the dimmer by the entrance. From bed, all they can do is switch the lights on or off.

After

Now with Diginet LEDsmart+™ the homeowner can dim as well as switch lights from any wall plate location. And with no additional wiring or control systems, the installation is now a whole lot easier.

Options for easy customisation

Diginet LEDsmart⁺™ products have many options that allow the installer to easily customise solutions to their customers' exact requirements.

Diginet LEDsmart⁺™ Rotary Dimmers, Push Button Dimmers, Switches, Timers and Digital Level Display come with interchangeable halo rings, bezels and Pipes in different colours included as standard, allowing you to customise them to match the customer's décor.

STANDARD ROTARY DIMMER AND DIGITAL LEVEL DISPLAY OPTIONS

LARGE & SMALL DIALS
Customers can choose from large or small dimmer dials to suite their aesthetic and deliver single or multi-dimmer control from one wall plate.

INTERCHANGEABLE COLOURED RINGS
Different coloured silicon rings allow the installer to customise the Rotary Dimmer's indicator ring to suit the customer's environment.

INTERCHANGEABLE LIGHT PIPES FOR DIFFERENT COLOURS
With the ability to change the LED display colour from white to orange, green or blue, the LEDsmart⁺™ Digital Level Display offers customization to make your lighting requirements enjoyable and easy.

OPTIONAL EXTRAS

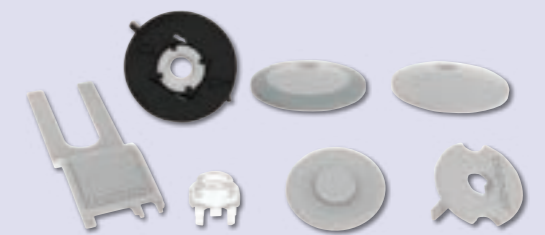### ADAPTOR KITS FOR CLIPSAL SATURN™ & CLIPSAL SATURN ZEN™ WALL PLATES

With these handy kits LEDsmart⁺™ Rotary Dimmers, Push Button Dimmers, Timers and Switches can be quickly and easily adapted to fit Clipsal Saturn™ and Clipsal Saturn Zen™ wall plates.

ROTARY KIT

PUSH BUTTON KIT

WALL MOUNTING KIT

STANDARD PUSH BUTTON DIMMER, TIMER & SWITCH OPTIONS

FLAT & ROCKER STYLE PUSH BUTTONS

Both flat and rocker style buttons available to suit the customer's aesthetic.

FLAT AND ROCKER BUTTONS
INCLUDED

ROCKER
BUTTON

FLAT
BUTTON

INTERCHANGEABLE COLOURED BEZELS

Different coloured bezels allow the installer to customise the indicator bezel on the switch to suit the customer's preference.

PUSH BUTTON LABELLING

Diginet LEDsmart+ Push Button devices can be fitted with optional 'clear' plastic cap, which allows a label to be placed inside. Labels can be printed on standard paper or thin card on any printer, in any font or colour.

Product functions & specifications

	ROTARY DIMMER/SWITCH	PUSH BUTTON SWITCH	PUSH BUTTON DIMMER/SWITCH	PUSH BUTTON MINUTE TIMER	PUSH BUTTON HOUR TIMER
FUNCTIONS					
Function	DIMMER/ SWITCH	DIMMER/ SWITCH	SWITCH	TIMER	TIMER
Product code	MMDM/RT	MMDM/PB	MMSW/PB	MMTM/PB	MMTH/PB
Single-way control	✔	✔	✔	✔	✔
Two-way control	✔	✔	✔	✔	✔
Multi-way control	✔	✔	✔	✔	✔
Indicator – white LED	✔	✔	✔	✔	✔
Rotary dial	✔	–	–	–	–
Integrated tap on/off switch	✔	✔	✔	✔	✔
Programmable minimum	✔	✔	✔	✔	✔
Programmable maximum	✔	✔	✔	–	–
Programmable kick-start function	✔	✔	–	✔	✔
Programmable off-state indicator	✔	✔	✔	✔	✔
Programmable timeout period	–	–	–	✔	✔
Kids bedroom mode — double-tap to dim down over 30 minutes	✔	✔	–	–	–
Wake up mode — double tap to dim up over 30 minutes	✔	✔	–	–	–
SPECIFICATIONS					
Electrical connections	TWO-WIRE (ACTIVE & LOAD, NO NEUTRAL REQUIRED)				
Nominal line voltage	220–240V AC				
Line voltage frequency	50HZ NOMINAL (47–53HZ)				
Load brightness range	0%–100% (TYPICAL FOR LED LOADS)				
Rated load	REFER COMPATIBLE LOAD TABLE				
Minimum load	1W				
Mounting	STANDARD AUSTRALIAN WALL PLATE APERTURE				
Timer range	–	–	–	1–30 MIN	¼ HR – 7½ HRS
Timer increment	–	–	–	1 MIN	¼ HR
Timeout default	–	–	–	15 MIN	½HR

COMPATIBLE LOAD TYPES

LOAD SYMBOL	LOAD TYPE	MAXIMUM LOAD	NOTES
	LED Lamps and Drivers	400W	Maximum permitted number of drivers is 400W divided by driver name plate power rating. Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power — factor result when connected to switch.
	Electronic Transformers	400W	
	Standard Iron-Core Transformers	250W	Due to variety of transformer designs, maximum LV lighting load is also dependent on transformer efficiency.
	Toroidal Iron-Core Transformers	300W	
	Incandescent	350W	
	CFLs	400W	Due to variety of CFL designs, maximum number is make/model dependant.

DIMENSIONS

Fits most Australian wall switch plate apertures

22mm
52mm

MMDM/RT

22mm
42mm

MMDM/PB
MMSW/PB
MMTM/PB
MMTH/PB

24mm
24mm
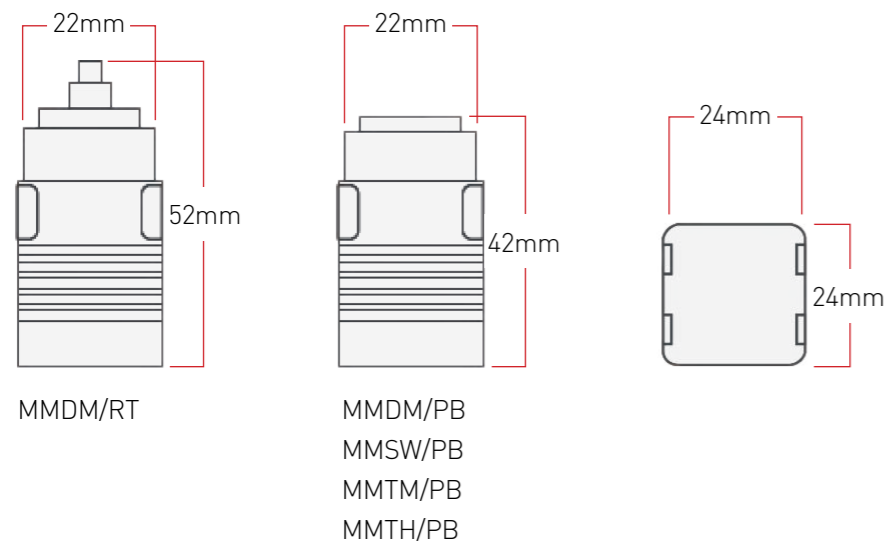
Wiring for one-way or two-way dimming & switching

Unlike conventional two-wire dimmers, Diginet LEDsmart+™ dimmers feature a built in push on/push off switch. To provide both dimming and on/off control. No separate switch is required.

NEW INSTALLATION OF ONE-WAY DIMMING & SWITCHING

ONE-WAY DIMMING & SWITCHING

ACTIVE
NEUTRAL

LAMP LOAD

SWITCHED ACTIVE
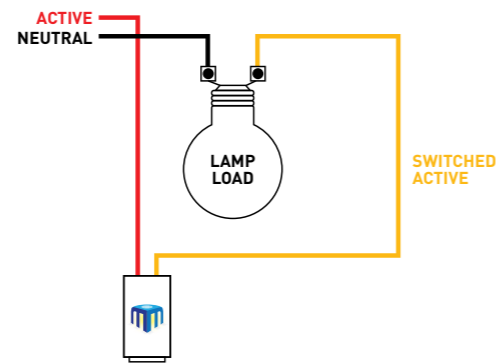
Dimmers without built in switch powered by MultiMate™ technology connect just like standard two-wire dimmers.

REPLACING EXISTING ONE-WAY SWITCH WITH ONE-WAY DIMMING & SWITCHING

EXISTING ONE-WAY SWITCH

ACTIVE
NEUTRAL

LAMP LOAD

SWITCHED ACTIVE

C 1
2
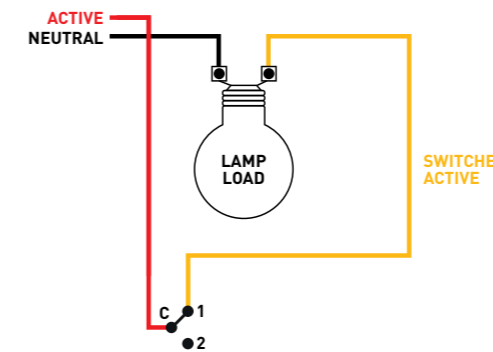
REPLACEMENT ONE-WAY DIMMING & SWITCHING

ACTIVE
NEUTRAL

LAMP LOAD

SWITCHED ACTIVE
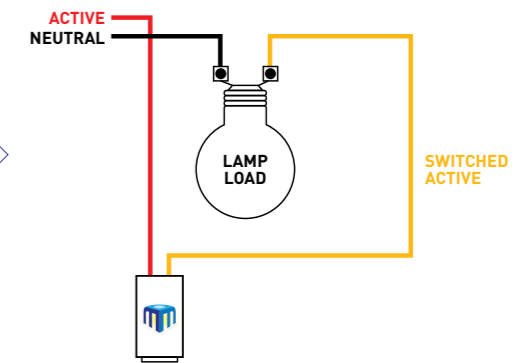
The Diginet LEDsmart+™ range features Rotary and Push Button Dimmers with a built in on/off switch. Both dimming and on/off are accomplished with a single dial or button, with no separate on/off switch required.

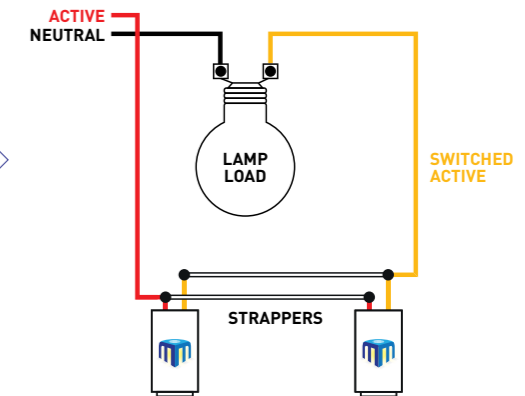## NEW INSTALLATION OF TWO-WAY DIMMING & SWITCHING

TWO-WAY DIMMING & SWITCHING

ACTIVE
NEUTRAL

LAMP LOAD
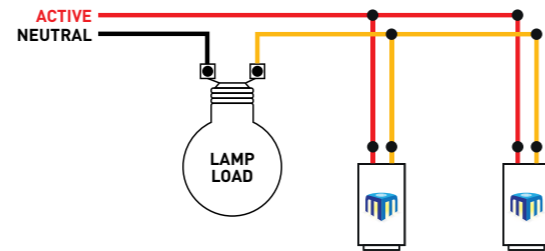
Two-way switching and dimming with Diginet LEDsmart+™ dimmers.

REPLACING EXISTING TWO-WAY SWITCH WITH TWO-WAY DIMMING & SWITCHING

EXISTING TWO-WAY SWITCH

ACTIVE
NEUTRAL

LAMP LOAD

SWITCHED ACTIVE

C 1   STRAPPERS   2 C
2   1
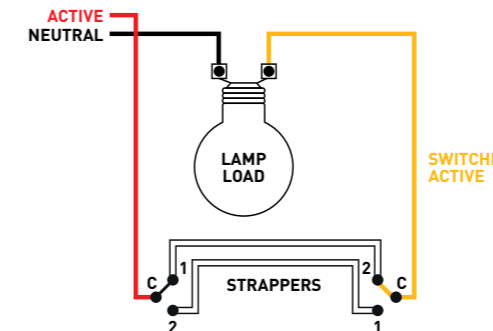
REPLACEMENT TWO-WAY DIMMING & SWITCHING

ACTIVE
NEUTRAL

LAMP LOAD

SWITCHED ACTIVE

STRAPPERS

When replacing existing two-way switching with two-way dimming/switching using Diginet LEDsmart+™ dimmers, the existing two-way 'strapper' wires can be used. No new wiring is required.

Wiring for multi-way dimming, switching & digital level display

To achieve multi-way dimming and switching using Diginet LEDsmart⁺™ dimmers, the required number of dimmers can be connected in parallel to the same load. So if more than three dimmers are required, they are simply wired in parallel.

NEW INSTALLATION OF MULTI-WAY (THREE-WAY OR MORE) DIMMING & SWITCHING
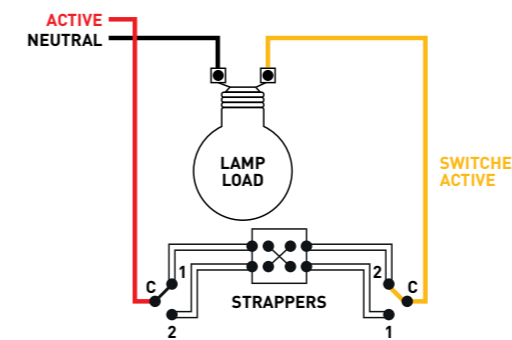
THREE-WAY DIMMING & SWITCHING
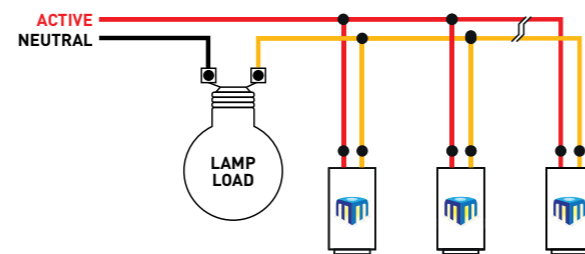
Required wiring for three-way dimming and switching using Diginet LEDsmart⁺™ dimmers. If more than three dimmers are required, further dimmers are simply wired in parallel.

REPLACING EXISTING MULTI-WAY SWITCH WITH MULTI-WAY (THREE-WAY OR MORE) DIMMING & SWITCHING

EXISTING THREE-WAY SWITCH

REPLACEMENT THREE-WAY DIMMING & SWITCHING
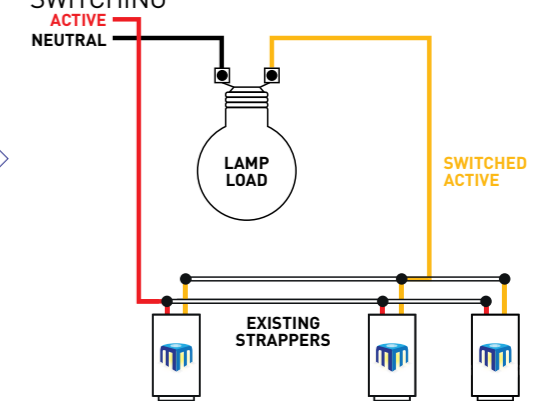
Traditional three-way switching using two rocker switches and one intermediate switch, with strappers between the switches. Rocker switches and intermediate switch are replaced with Diginet LEDsmart⁺™ dimmers. The existing strappers are used to connect the dimmers in parallel. No new wiring is required.

Accessories

ADAPTOR KIT FOR LEDsmart⁺ ROTARY DIMMERS/SWITCHES

ITEM NUMBER: DGACCESSPK3

Allows LEDsmart⁺ Rotary Dimmers to be adapted to fit Clipsal Saturn™ and Clipsal Saturn Zen™ wall plates.

- A 1 x Bezel and Dial Removal Tool
- B 5 x Large Dial pack
- C 5 x Small Dial pack
- D 5 x Light Ring: Large (Blue, Green, Orange)
- E 5 x Light Ring: Small (Blue, Green, Orange)
- F 5 x Rotary Retaining Bezel
- G 5 x Dial Clamp Ring
- H 5 x Rotary Adaptor (Clear)
- I 5 x Rotary Adaptor (White)

INSTRUCTIONS

This kits contains parts to convert up to 5 LEDsmart⁺ rotary dimmers to suit Clipsal Saturn or Clipsal Saturn Zen

ADAPTOR KIT FOR LEDsmart⁺ PUSH BUTTON DIMMERS/SWITCHES/TIMERS

ITEM NUMBER: DGACCESSPK2

Allows LEDsmart+™ Push Button Dimmers, Switches and Timers to be quickly and easily adapted to fit Clipsal Saturn™ and Clipsal Saturn Zen™ wall plates.

- A 1 x Bezel & Dial Removal Tool
- B 20 x Button Retaining Bezel
- C 20 x Button Adaptor (White)
- D 20 x Button Adaptor (Clear)

INSTRUCTIONS

This kits contains parts to convert up to 20 LEDsmart⁺ push buttons dimmers to suit Clipsal Saturn or Clipsal Saturn Zen
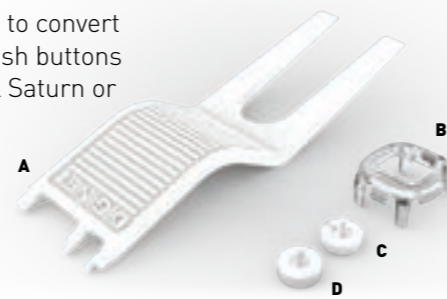

LEDSMART+™ ROTARY DISC AND WALL MOUNTING KIT

ITEM NUMBER: MMCE/RT

It is suitable for use with LEDsmart⁺ Rotary Dimmers, item number MMDM/RT. It is mounted directly into a Gyprock™ wall, with no additional wall plate required. This provides an elegant interface for LEDsmart⁺ Rotary Dimmers, with a visible diameter of only 56mm.

- A 1 X Wall Mounting Kit
- B 1 X White Rotary Disc with faux glass outer ring
- C 1 X White Rotary Disc
- D 1 X Bezel and Dial Removal Tool
- E 1 X Rotary Retaining Bezel
- F 1 X Adaptor Base for custom made rotary discs
- G 1 X Dimmer Removal Tool
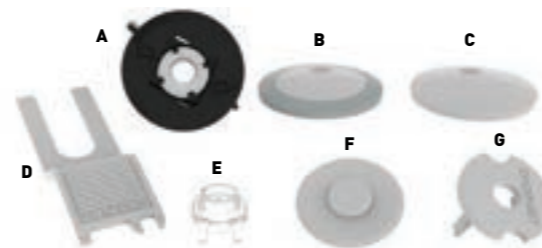
COLOURED BEZEL KIT FOR LEDsmart⁺ PUSH BUTTON DIMMERS/SWITCHES/TIMERS

ITEM NUMBER: DGACCESSPK1

Allows LEDsmart⁺ Push Button Dimmers, Switches and Timers to be customised to provide a blue, orange or green indicator, rather than the standard white indicator.

- A 1 x Bezel & Dial Removal Tool
- B 10 x Push Button Retaining Bezel — Orange
- C 10 x Push Button Retaining Bezel — Blue
- D 10 x Push Button Retaining Bezel — Green

INSTRUCTIONS

- Can be used with both LEDsmart and LEDsmart⁺ ranges
- Bezel removal tool and detailed instructions included with each kit
- One of each is pre-packaged with LEDsmart⁺ push button devices, not LEDsmart devices
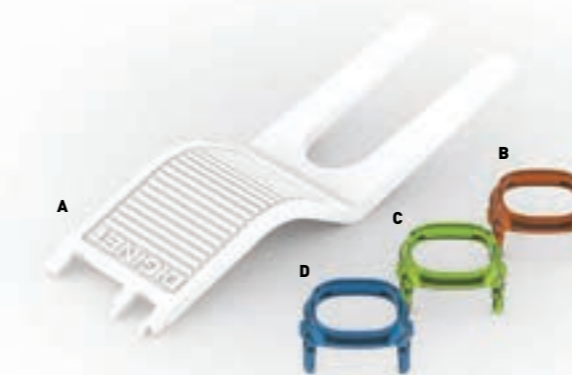
LOAD BYPASS DEVICE

ITEM NUMBER: MMBP

This device can be used to correct issues seen with some modern lighting load types such as LEDs or CFLs when used in conjunction with LEDsmart⁺ products (or other electronic control devices). The devices is designed to fix issues such as:

- When switched off via a LEDsmart⁺ product, lights flicker, pulse on/off or do not switch off completely
- When switching on via a LEDsmart⁺ product, lights have difficulty switching on and LEDsmart⁺ indicators flicker or pulse

DIGINET
CONTROL SYSTEMS

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