

# LEDsmart™ Adaptive Phase Dimmer



[www.dignet.net.au](http://www.dignet.net.au)



Range MEDM

## Overview

Designed in Australia to provide optimised dimming of LED based lamps and drivers, this high quality, two-wire phase control wall plate dimmer has a minimum load rating of 2W, allowing it to adapt to a wide range of available LED drivers.

Although optimised for LED lighting loads, this dimmer also provides excellent compatibility with other common lamps types such as incandescent lamps, 12V halogen (dichroic) lamps/ transformers and CFL's.

## Features

**Fits Australian wall switch**  
plate apertures (For example, the Sylvania Trader Cougar range, plus HPM and Clipsal ranges)

**Rotary control with mechanical**  
adjustment for minimum brightness level

**Separately switched 2-wire**  
design – no neutral wire connection required for wall-plate retrofit installation

**An integrated LED indicator**  
illuminates the dimmer knob and switch at low dimming levels

**Minimum brightness**  
typically 0%

**Incorporates a thermal fuse to**  
protect itself against overheating

**Incorporates filtering to reduce**  
load brightness variation under conditions of line voltage ripple signal injection

**Thermal wind-back for overload**  
and over-temperature protection

**“Soft-start” to help prolong the**  
lamp and driver life

**Protected against damage from**  
connection to incompatible inductive load types (i.e., motor loads), via conduction angle wind-back







**Stable operation with most**  
non-dimmable lamps (to a limited dimming level, lamp dependent)

**Inherent immunity to**  
installation wiring short circuit fault

**Complies with all relevant**  
Australian safety standards



## Specifications

Compatible Load Types			
Load Symbol	Load Type	Maximum Load	Notes
	Dimmable LED Drivers	400W	The LED driver must be dimmable. Please consult LED manufacturers specifications Maximum permitted number of drivers is 400W divided by driver nameplate power rating. Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power-factor result when connected to dimmer.
	Electronic Transformers	400W	
	Iron-Core Transformers (Standard)	250W	Due to variety of transformer designs, maximum LV lighting load is further dependent on transformer efficiency.
	Iron-Core Transformers (Toroidal)	300W	
	Incandescent / 240V halogen	350W	
	Dimmable CFLs	400W	Due to variety of CFL designs, maximum number of CFL lamps is dependent on particular CFL make/model.

Multi-gang de-rating	De-rating Examples
In applications where multiple dimmers are installed in a multi-gang plate, a de-rating factor is applied to the maximum load as follows	Example 1 – Two dimmers (and associated switches) installed in a wall plate. The maximum LED load which can be connected to each dimmer = $400W \times 0.85 = 340W$ per dimmer
	Example 2 – Three dimmers (and associated switches) installed in a wall plate The maximum LED load which can be connected to each dimmer = $350W \times 0.70 = 245W$ per dimmer
Number of dimmers per plate	De-rating factor
1 (plus a separate switch)	No de-rating
2 (plus 2 separate switches)	0.85
3 (plus 3 separate switches)	0.70

Incompatible Load types
Ceiling Sweep Fan motors

Nominal Line Voltage Amplitude Range	
Line Voltage Frequency	50Hz Nominal (47-53Hz)
Load Brightness Control Range	<1% to > 95% (load dependent)
Rated Load	Refer Compatible Loads
Minimum Load	2W

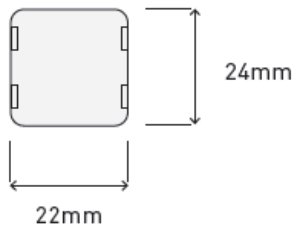
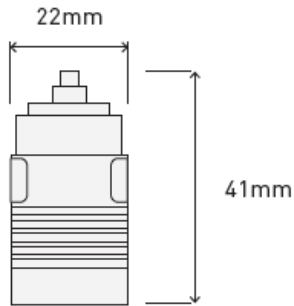


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Optimised for LED lighting loads

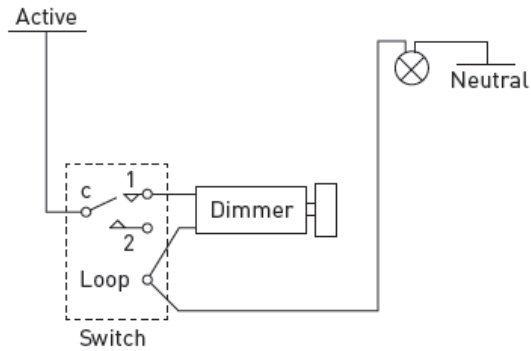
## Dimensions

### LEDsmart Dimmer

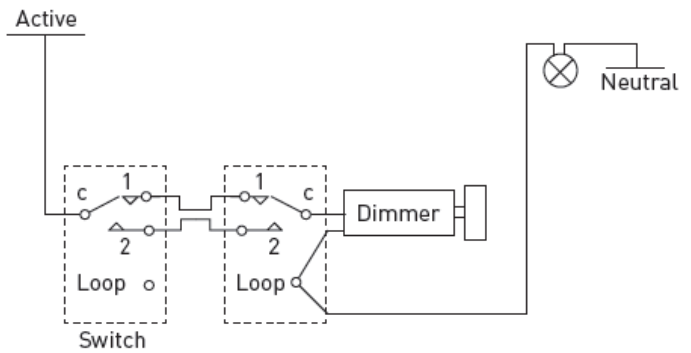


## Typical Electrical Connections

### One-Way Connection Diagram



### Two-Way Connection Diagram



## Approvals & Compliance

IP20  

### PRODUCT OF GERARD LIGHTING PTY LTD

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