# Auto Detect Intelligent Push Button Universal dimmer Trailing / Leading edge

Model: LED-C300DIM



## **IMPORTANT!**

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.

Apply IEC-60898-1 compliant 250V 6A type C MCB as overload protection.

## **WARNING: ELECTRIC SHOCK HAZARD**

Hazardous voltage maybe present at the output of the dimmer despite setting the dimmer to zero brightness level. Look out and tag the input circuit before accessing the wiring connections. Failure to follow this warning can result in death or serious injury.

## **ELECTRICAL SPECIFICATIONS**

Parameter	Value	
Supply voltage & Frequency	230-240V ~ 50Hz	
Maximum Load	300W @ 240V~, derate for multi-gang installations	
Dimming Technology R.C.L	Auto Detect Trailing / Leading edge driven control Also, LE & LED edge dimming mode can be set by user manually.	
Compatible loads for <b>TEauto mode</b>	LED Dimmable	Dimmable LED lighting with compatible Electronic Transformers
	ф	Incandescent lighting, MV Halogen lamps
		LV Halogen Lighting with electronic transformers
Compatible loads for <b>LE mode</b>		LV Halogen Lighting with Iron-core transformers
*Must be manual change to LE mode	M	Small motor loads, ceiling sweep fans
Operating Temperature	0° - 45°C	
Operating Humidity	10 - 90% R.H.	
Mounting	Suits for Clipsal and HPM wall Plate	
Safety Compliance	AS/NZS 60669-2-1 : 2013	
EMC Compliance	AS/NZS 60669-2-1 : 2002+A1:2008+A2:2015	

#### NOTE:

Operation at elevated temperatures or voltages may cause the thermal protection circuit to operate. If this happen, decrease the connected load to prevent re-occurance.

## THERMAL OVERLOAD PROTECTION

Build-in thermal protect circuit. Apply a re-settable thermostat component, when module temperature raise achieve 110  $^{\circ}$  C will activate the protection.

#### SHORT CIRCUIT PROTECTION

Build-in short circuit protect, once activate, the dimmer will suspend operation around 5 second after that, it will auto-ON again. If detect remain short circuit or over current, the module will suspend operation until disconnect dimmer power and Switch ON dimmer again reset to normal operation. In this case, please check the circuit with electrical technician.

## **FEATURES:**

- Suitable for 1-way or Multi-way full Dimming and switching.
- Minimum load down to 3W of capacitive or resistive load, such as Dimmable LED Lighting, Incandescent Lighting, MV Halogen / LV Halogen Lighting with electronic transformers.
- Lamps soft-start operation, to extend longer lifetime for the lamp.
- LED back light for indicate the dimming mode.
- User setting for the minimum dim Level.
- Build-in short circuit protect, designed to ensure the dimmer can survive in case of wiring fault or catastrophic failure of the load.
- Build-in re-settable thermal cut-off to protect the dimmer over normal operation temperature caused by overloads.
- Suitable mounting with Clipsal and HPM Plate.
- Complies with Australian and International safety standards.

### NORMAL OPERATION

Operation of Push Button Dimmer:





Short press button to **ON** or **OFF** the lamp.
Toggle switch to dim.
Press and hold dim up until maximum level,
or release, press and hold dim down until minimum level.







# **COMPATIBLE LOADS**

Compatible loads for TE mode		
LED	Integral Dimmable LED lamps	
	Dimmable LED lighting with compatible Electronic Transformers	
\$	Incandescent lighting, MV Halogen lamps	
	LV Halogen Lighting with Electronic Transformers	
Compatible loads for LE mode *Auto change to LE mode		
	Lighting with Iron-core Transformers (Max.50W)	
M	Small motor loads, ceiling sweep fans (Max.50W)	

#### NOTE:

When connect with IRON-CORE transformers or MOTOR-LOADS, Only Leading Edge mode (LE) could be applied, the TEauto mode can not be used in this case.

 $\label{lem:multiple} \mbox{Multiple compatible loads can be used as the total lamp wattage does not exceed the maximum load rating of the dimmer.}$ 

Some lamps may exhibit unexpected performance characteristics when cold. Dimming performance should improve after the lamp warms up. Or in case of lamp appears unstable status, it could be changed to LE mode.

## **MULTI-GANG DERATING**

For applications where Dimmers are multi-ganged, derate the maximum load rating of the unit accrding to the derating table show as below:

Number of Dimmers	Maximum Load per Dimmer
x1	300W
x2	250W
х3	200W

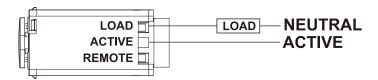
## **INSTALLATION**

#### Wiring Details:

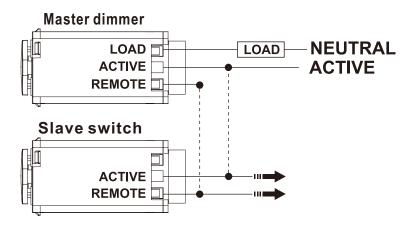
- 1. Disconnect power. Lock out and tag the relevant circuit at the mains switchboard.
- 2. Remove existing switch from wall.
- 3. Connect the dimmer in accordance with the wiring diagrams.
- 4. Refit switch plate to wall and fit the dimmer knob to the shaft.
- Reconnect power. Turn the Dimmer on and check its operation by short press button to ON or OFF the lamp.

## **WIRING DIAGRAMS**

## **One Way Operation**



## **Multi-way Operation**



SD

#### NOTE:

The Dimmer must always be connected to the LINE side of the load. Multi-way retractive switch or push switch can be control up to 20 units for UP/DOWN dim and ON/OFF function.

Two or more dimmers MUST NOT be connected in parallel or series to control the same load from two different locations.

# MINIMUM BRIGHT LEVEL SETTING

How to set the Minimum bright level :

Adjust to required minimum brightness then short press 5x within 5 seconds to save minimum level and LED indicator will flash 3times.

How to reset the Minimum bright level:

Short press 7x within 5 seconds to reset the minimum level and LED indicator will flash 3times then ddjust to required minimum brightness then short press 5x within 2 seconds to save minimum level and LED indicator will flash 3times.