

## SAFETY WARNING

Before use please read carefully and use in accordance with these safety instructions.

Before commencing any electrical work ensure the supply is switched OFF at the mains. Either by switching off the consumer unit or by removing the appropriate fuse. This product should be installed in accordance with the relevant sections of the building regulations code and in accordance with the latest edition of IEE regulations (BS 7671).

If the unit is to be used as a replacement for an existing product, remove the existing unit from its location and disconnect the wiring. Connect the wires as shown in diagram. Ensure terminals are properly tightened and ensure no bare wires are visible. When pushing back into the backbox ensure no wires are trapped. Read the instructions carefully before starting the installation process and keep them safe for future reference.







IF IN ANY DOUBT, PLEASE CONTACT A QUALIFIED ELECTRICIAN.

### WARNING

Do not exceed the load rating as shown on the back of the product

## SWITCHES MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN

## ELECTRICAL SPECIFICATIONS

Parameter	Value
Supply voltage & Frequency	230-240V ~ 50Hz
Maximum Load	400W , derate for multi-gang installations
Dimming Technology 	Auto Detect Trailing / Leading edge driven control Also, Leading edge dimming mode can be set by user manually.
Compatible loads for TEauto mode	 Dimmable LED lighting with compatible Electronic Transformers
	 Incandescent lighting, MV Halogen lamps
	 LV Halogen Lighting with electronic transformers
Compatible loads for LE mode <b>*Must be manual change to LE mode</b>	 LV Halogen Lighting with Iron-core transformers
	 Small motor loads, ceiling sweep fans
Operating Temperature	0° - 45°C
Operating Humidity	10 - 90% R.H.
Mounting Centres	In compliance with BS5733 Pattern Plate
Safety Compliance	BS/EN 60669-2-1 : 2013
EMC Compliance	BS/EN 60669-2-1 : 2002+A1:2008+A2:2015 Excepting when used in conjunction with electronic load

### NOTE :

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

### THERMAL OVERLOAD PROTECTION

Build-in thermal protect circuit. Apply a re-settable thermostat component, when module temperature raise achieve 110°C will activate the protection, while temperature cool down approx. 75°C it will become normal operation. If occur frequently, please reduce loading.

### SHORT CIRCUIT PROTECTION

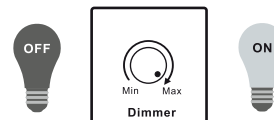
Build-in short circuit protect, once activate, the dimmer will suspend operation around 5 second after that, it will auto-ON again. If detect remain short circuit or over current, the module will suspend operation until disconnect dimmer power and Switch ON dimmer again reset to normal operation. In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

## FEATURES

- Suitable for 1-way or 2-way switching.
- Minimum load down to 5W 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.
- 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.
- Complies with BS/IEC safety standards.

## NORMAL OPERATION

Operation of Dimmer Knob and Push Switch :



Push knob ON or Push knob OFF the lamp.  
Turn knob right to increase brightness to maximum level.  
Turn knob left to decrease brightness to minimum level.

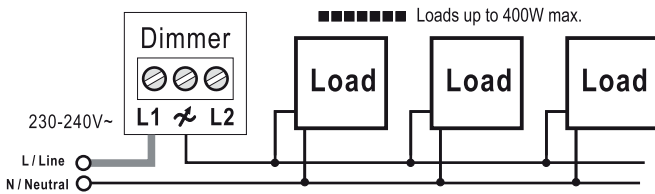
## INSTALLATION

### IMPORTANT: PLEASE READ THE SAFETY WARNING BEFORE COMMENCING ANY WORK.

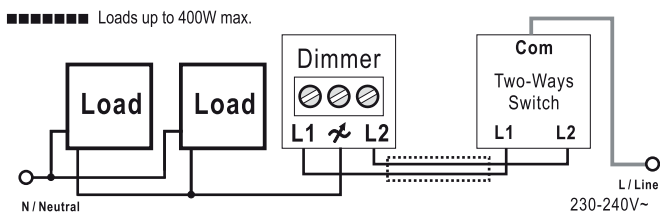
1. Remove the hex nut on the dimmer module, insert the shaft of the module from the rear of plate into plate cut out, fix in place using the hex nut till tight.
2. Push on the dimmer rotary knob onto the shaft until no longer loose
3. Undo the terminal screws until they no longer obstruct the cable entry holes.
4. Trim wires to correct length allow cable to reach terminals comfortably.
5. Strip back the insulation (plastic sheath) on the cable to approx 7 to 8mm.
6. Caution: An earth wire must be fitted if a metal mounting box is used.
7. If mounted into a plastic mounting box the earth lead must be fully insulated to prevent earth wire touching live parts or a push-in earth terminal.
8. Connect the wires to the correct terminals according to the marking on the back of the product and wiring diagram.
9. When replacing a switch, take note of the wire positions and terminal markings on the old switch.
10. Carefully push the wired unit back into the mounting box, ensuring the cables are not trapped or pinched.
11. Fit and tighten the fixing screws as supplied. Do not over tighten the screws as it may cause damage to the front plate or the mounting box threads.

## WIRING DIAGRAM

### One Way Operation









### Two Way Operation



**NOTE:**  
The Dimmer must always be connected to the LINE side of the load.  
Two or more dimmers **MUST NOT** be connected in parallel or series to control the same load from two different locations.

## COMPATIBLE LOADS

Compatible loads for TEauto mode	
	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 *Must be manual change to LE mode	
	LV Halogen Lighting with Iron-core Transformers
	Small motor loads, ceiling sweep fans

**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.

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.

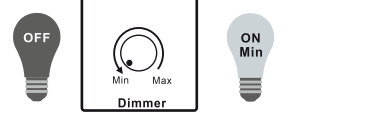
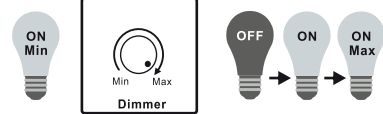



### MULTI-GANG DERATING

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

Number of Dimmers	Maximum Load per Dimmer
x1	400W
x2	330W
x3	250W



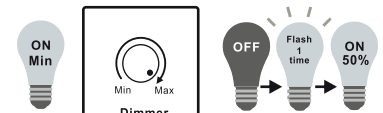

## MODE SETTING

How to set TEauto or LE Mode (Factory default TEauto mode) :

	Operate steps of Dimmer and Switch	Actions
1		Lamp in OFF state, at min position and until around 5 seconds to push ON, and wait lamp stable.
2		Turn to max position, push OFF and push ON at max bright.
3		Turn to min position, push OFF and push ON again, lamp will appear flash 4 times at half-bright level, now is entry TEauto / LE mode settings.
For select TEauto mode (Factory default) *SEE COMPATIBLE LOADS		
TEauto mode		At min position, push OFF and push ON at min bright to confirm and save setting with flash 1 time.
For select LE mode (for special required*) *SEE COMPATIBLE LOADS		
LE mode		Turn to max position, push OFF and push ON at max bright to confirm and save setting with flash 3 times.
Each step must be performed within 10 seconds, if no, it will time out and auto exit program without save		

## MINIMUM BRIGHT LEVEL SETTING

How to set the Minimum bright level :

	Operate steps of Dimmer and Switch	Actions
1		Lamp in OFF state, at max position and until around 5 seconds to push ON, and wait lamp stable.
2		Turn to min position, push OFF and push ON at min. bright.
3		Turn to max position, push OFF and push ON again, lamp will appear flash 1 time at half-bright level, now is entry minimum Brightness settings.
4		Set your desire min bright, push OFF and ON for once, lamp will appear at half-bright level then return to normal bright level, it's confirmed and save setting.
Each step must be performed within 10 seconds, if no, it will time out and auto exit program without save		

