

# Installation Instructions: Smart Universal LED Trailing/Leading Edge Dimmer Module (10803)

## Important Information

We recommend that luminaires are installed by a qualified electrician ensuring the installation complies with current IEE wiring regulations BS7671:2018 & local building control.

 BELL will not accept responsibility for any claims arising from a poor installation.

### **Important User Advice**

- The ambient room temperature should not exceed 30°C.
- · Always switch off mains supply before installing.

This product may contain substances that can be hazardous to the environment if not disposed of properly. Electrical and electronic equipment should never be disposed of with general household waste but must be separated for its correct treatment and recovery. Where possible recycle your packaging.

#### Installation

## Incorrect installation may damage the dimmer beyond repair.

- 1. Switch off the mains supply before commencing the installation.
- 2. If removing an existing switch, disconnect the wiring from the switch terminals at the rear and take note of the present wiring of the switch and the marking on the terminals.
- 3 Terminate the dimmer switch in accordance with the diagrams in the Wiring Instructions section. Take care that no bare wires project out of the terminals. Keep wires together in a terminal if they were together in vour old switch.
- 4. After connecting the wires screw the dimmer switch gently into the wall box so that the front plate does not distort or crack. Do not trap the wiring between the rear of the dimmer and the back of the wall box.
- 5. Once installation is complete, switch on the mains supply. When switching on the dimmer for the first time you might need to set up the min. brightness and max. brightness, dimming mode as well.

## Read these instructions before installation and retain for future reference This equipment should be installed by a competent electrician

This universal dimmer has been developed specially for Dimmable LED Lamps. Its small size and allows installation in a multi-gang front plate.

The minimum brightness setting of the dimmer can be adjusted to achieve the optimum dimming range for a particular load. See "Adjusting the Minimum Brightness" below.

Dimming mode can be switched manually to be compatible with Leading Edge or Trailing Edge dimming. (See dimming mode switching operation guide below).

The latest technology ensures no flickering at the maximum level. You may need to refer to these instructions if you change your lights to a different type. Keep these instructions for reference.

| Specification                                    |           |
|--|-----------|
| Operating Voltage                                | 220-240 V |
| Frequency  | 50 Hz     |
| Maximum Load                                     | 150 W     |
| Minimum Load                                     | 5 W       |
| Dimming Mode                                     | Universal |
| Control Method                                   | Two way   |
| Dimmable LED lamps                               | 5-100W    |
| LV Halogen lighting with electronic transformers | 150W      |
| Incandescent lighting,<br>MV Halogen lamps       | 5-150W    |

| De-rating of multiple dimmers De-rating required when installed in multi-gang |                  |  |
|---|------------------|--|
| Dimmers per plate   | De-rated wattage |  |
| 1 per plate   | No De-rating     |  |
| 2 per plate   | 85% Each dimmer  |  |
| 3 per plate   | 70% Each dimmer  |  |
| 4 per plate   | 55% Each dimmer  |  |
| 5 per plate   | 40% Each dimmer  |  |

#### Warning

Certain light sources may not behave according to their power rating when used with a dimmer. An overload will result in the safety features switching the dimmer off. We always recommend to connect under the suggest load.



This dimmer switch is suitable for 1-way or 2-way wiring circuits. There are three terminals per module.

#### 1 way Circuits

In 1-way lighting circuits each lamp is controlled by one dimmer switch.

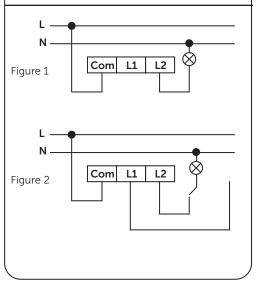
Follow the wiring in Figure 1.

COM live supply, L1 load 1, L2 load 2

#### 2 way Circuits

When controlling the load from two positions, it is only possible to have one dimmer switch. The other need to be a 2-way switch. 2 way lighting circuits have 2 switches turning the same lamps on and off from 2 different locations (eg at the top and bottom of the stairs. Follow the wiring in Figure 2.

COM live supply, L1 load 1, L2 load 2



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## Operation

## **Factory Reset**

When first installing the dimmer or replacing new lights, a factory reset is required to achieve the optimal dimming performance.

## Reset the minimum brightness level

- 1. Switch on and set the dimmer knob to the MINIMUM position (turn fully anti-clockwise)
- 2. Push the knob 8 times
- 3. The light will step up and down in brightness twice to show that the dimmer is in Configuration Mode, then either stay at low light level or go off.

## Adjust the minimum brightness level

- 1 After the factory reset, slowly adjust to the brightness required, leave the dimmer in this position.
- 2 Push the knob 4 times until the light steps up and down in brightness once, the setting saved.

## Change the dimming mode from Trailing Edge to Leading Edge

The default dimmer setting is Trailing Edge to change to Leading Edge refer to the instruction below.

- 1 Turn on the load and set the lights to maximum brightness
- 2 Switch the load on and off 5 times, the load will flash twice to indicate the dimmer is in Leading Edge mode.

Note: To switch back in to Trailing Edge mode, repeat the above operation. The load will flash once to indicate the dimmer is in Trailing Edge dimming mode.

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