





**Installation Instructions:****Model:** Electronic On/Off Auto Detect Intelligent Universal Dimmer Module**Electrical Specification**

Parameter	Value
Supply voltage & Frequency	220-240V ~ 50Hz
Rating	10-350W: incandescent lamps, high voltage halogen lamps and electronic step-down converter for extra low-voltage incandescent lamps. 3-250W: dimmable LED lamps.
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
Operating Temperature	0° - 45°C
Operating Humidity	10 - 90% R.H.
Mounting Centres	85mm UK Pattern Plate

Installation

Read the instructions carefully before commencing installation. This product must be installed in accordance with the latest building and IET wiring regulations. If in any doubt, please consult a **qualified electrician**.

- Switch off at the mains. If unit is to replace an existing product, remove existing product and disconnect the wiring.
- Ensure that the mounting box is free of projecting screw heads.
- To connect the wiring for 1-way or 2-way circuits, refer to the appropriate diagrams under “Typical Wiring Diagrams”. Ensure terminals are properly tightened and no bare wire is visible.
- After connecting the wires to the modules, connect the Earth wire to the earth TERMINAL.
- Push the unit back into the mounting box, ensuring conductors are not trapped between the rear of the dimmer and the back of the mounting box and fasten the unit to the wall using the fixing screws provided.
- For grid products fasten the front plate to the yoke with the shorter fixing screws provided
- Attach the dimmer knobs to the modules.
- Once installation is complete, switch on the mains supply to operate the dimmer switch.

NOTE:

When connected with IRON-CORE TRANSFORMERS or MOTOR-LOADS, only leading-edge mode (LE) should be applied, the TE auto mode cannot be used in these cases.

Multiple compatible loads may be used at the same time if 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 once the lamp warms up.

In the case where the lamp seems unstable, check to see if it should be changed to leading-edge mode (LE).

WARNING: ELECTRIC SHOCK HAZARD

Hazardous voltages may be present at the output of the dimmer despite setting the dimmer to the zero-brightness level. Ensure the dimmer is disconnected from the mains before accessing any wiring connections or removing it from the wall. Failure to follow this warning may result in serious injury or death.

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Waste electrical products should not be disposed of with household waste.
Please recycle where waste disposal facilities exist.
Check with your retailer, wholesaler or local authority for recycling advice.



Product Features

- Suitable for 1-way or 2-way switching.
- Suitable for capacitive or resistive load.
- Suitable for control of dimmable LED, dimmable CFL, incandescent and MV/LV Halogen lamps with electronic transformers.
- Most popular **DIMMABLE** LEDs are dimmable down to around 5-10% and up to 100%
- Recommended minimum load rating of 3W and maximum load rating of 250W*
- User can directly adjust the minimum brightness setting of the dimmer for various lamps connected to the dimmer (See "Operation of Minimum Brightness Settings" below).
- Soft start "on" and soft stop "off", which help to extend the life of connected lamps.
- Built-in short circuit protection designed to ensure the dimmer survives in the event of a wiring fault or catastrophic failure of the load.
- LEDMOD dimmer can run either in Trailing Edge (TE) dimming mode or Leading Edge (LE) dimming mode. (This is set manually - see "Mode Settings" below).
- Built-in resettable thermal cut-off to protect the dimmer during normal operation in the event of current overload.
- Complies with BS/IEC safety standards.

Operation of Dimmer Knob

- Push-on/Push-off switch action and a rotary action to dim the light
- Turn clockwise to increase brightness level of lamp until there is a red-light flash
- Turn anti-clockwise to decrease brightness level of lamp until there is a green-light flash

Minimum Brightness Setting

- Push knob to switch light ON
- Push & hold the knob for 15 seconds until the lamp flashes and appears at half brightness level (this has now entered the minimum brightness setting)
- Turn to minimum desired level and push the knob again & lamp should return to maximum brightness level. This setting is now confirmed, and the settings saved

Note: Each step must be performed within 15 seconds or else it will timeout and auto exit the program without saving

Mode Setting

Lamp **OFF** and LED indicator as below:

GREEN – TEauto mode

GREEN + RED – TE mode

RED – LE mode

Note: Colour LED Indicator will timeout after 15 seconds

TEauto, TE or LE Mode Setting

- With lamp in OFF state, press & hold the knob for 15 seconds until LED indicator begins to flash (this has now entered the mode setting)
- Turn the knob left or right to select the desired mode (see above for LED indicator colour guide)
- Push knob to confirm, save and exit

Note: Each step must be performed within 15 seconds or else it will timeout and auto exit the program without saving

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Thermal Overload Protection

Product has a built-in thermal protection circuit which activates once the temperature reaches 110°C. After cooling, normal operation will recommence once the temperature drops to approx. 75°C. If this occurs frequently then please reduce the loading.

Short Circuit Protection

Product has a built-in short circuit protection. Once operated, the dimmer will suspend operation for approx. 5 seconds before turning on again. If the short circuit or over current remains after the 5 seconds, the module will suspend operation until it has been disconnected from the power. If this occurs, please consult a qualified electrician.

Multi-Gang De-Rating

For installations where dimmers are multi-ganged and on GLs loads, de-rate the maximum load rating of the unit according to the table below:

Number of Dimmers	Maximum Load per Dimmer
x1	250W
x2	200W
x3	150W

Typical Wiring Diagrams:

1-Way Switching and Dimming

In 1-way lighting circuits, each lamp is controlled by one switch. The dimmer switch should replace the existing switch. Remove the existing switch taking note of the wiring of the switch and the terminal markings. Connect the wires as shown in Figure 2. Do not connect any conductor to the dimmer terminal labeled as "Rs". This is only for use with 2-way switching.

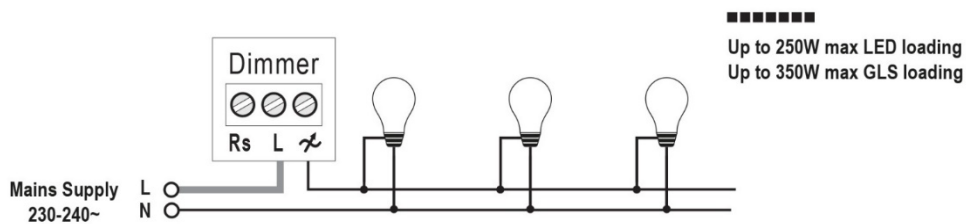


Figure 2: 1-Way Switching and Dimming

2-Way (or Multi-Way) Switching and Dimming

For 2-way (or multi-way) installations, two or more switches are used to control the same lights from two or more different locations. This arrangement is commonly used at the top and bottom of staircases or at the entry and exit doors to a room. Only one standard plate switch may be replaced with a dimmer switch in a 2-way (or multi-way) installation. Any other switches installed must be **RETRACTIVE** and **NOT A STANDARD LIGHT SWITCH**.

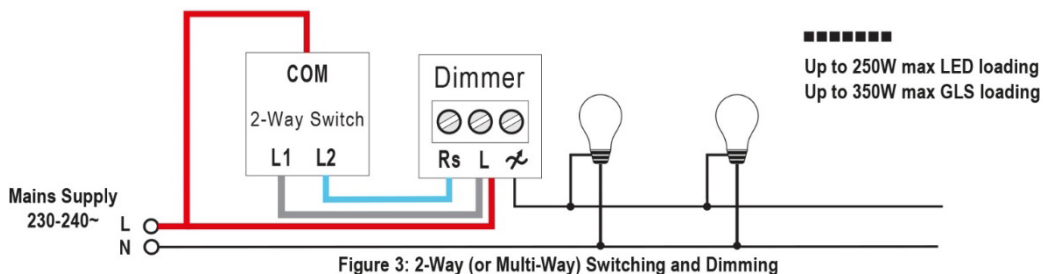


Figure 3: 2-Way (or Multi-Way) Switching and Dimming

NOTE: The dimmer must be connected to the LINE side of the load.

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