

Dimmer Switch

These dimmers comply with both BS EN 60669-2-1 & BS EN 55015

Please keep this leaflet for future reference



SAFETY INSTRUCTIONS

- This product must be installed by a competent person in accordance with the current editions of the IEE Wiring Regulations (BS7671) and Buildings Regulations. If in any doubt, consult a qualified electrician.
- To prevent electrocution, do not work on any appliance live. Turn off mains electricity supply before commencing work.
- If this product has a metal front plate it **must** be earthed.
- To prevent fire hazard do not exceed the related load specified for the product.
- The minimum box depth required for the Logic Plus dimmers when using the supplied pattress, is 16mm. Without the pattress and for all dimmers with metal front plates, the minimum depth is 25mm.
- Dimmer switches must not be used in bathrooms, washrooms or any location subject to splashes of water condensation or dampness.
- Product and packaging should be disposed of via standard refuse facilities at the end of their life.

44158 PL Ed. 2

SPECIFICATIONS

Nominal mains supply voltage 230 volts
 Max. acceptable mains fluctuation..... 216 to 253 volts a.c.
 Mains supply frequency..... 50Hz ± 3Hz
 Ambient temperature range 0°C to 40°C

USE WITH FUSED GLS TUNGSTEN FILAMENT LAMPS TO BS EN60064, RATED AT 230/240 VOLTS ONLY.

NOT FOR USE WITH LOW VOLTAGE OR ENERGY SAVING/ FLUORESCENT LIGHTING.

UNDER NO CIRCUMSTANCES EXCEED THE MINIMUM / MAXIMUM RATINGS GIVEN IN THE CHART SHOWN ON PAGE 5.

GENERAL INSTALLATION INFORMATION

- Dimmers are available with one or two gang modules, which means it is possible to have one or two individual dimmer modules on the same front plate.
- The control knob(s) turn on the mains, as well as adjust the light setting. Some dimmers work on a push on/push off action, others have rotary switches, which work on the knob(s) being turned from the minimum (anti-clockwise) end of the rotational movement in a clockwise direction.
- Once the mains has been switched on, rotation of the knob(s) will vary the light setting.
- The terms one-way and two-way switching refer to the mode of switching required in an installation.
- Dimmers with rotary switches can be used for one-way switching only and are used in installations that require just one switch to control a circuit. (i.e. one light that is either on or off.) **See Figure 1.**
- The push on/push off type of dimmers can be used for two-way switching and are applied to installations where a circuit is often controlled by two switches, e.g. controlling a light circuit from two switches located some distance apart, one switch at one end of the room and an additional switch at the other.
 In a two-way installation, as shown in **figure 2**, only one

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Size of front plate	Number of dimmers mounted on plate	Power/Load rating With GLS lamps	
		Min. Wattage	Max. Wattage
1-gang	Single	40	250
1-gang	Double	40	250
2-gang	Triple	40	250
1-gang	Single	65	450
1-gang	Single	75	500
2-gang	Double	65	450

On front plates mounting multiple dimmers, the minimum/maximum wattage ratings given are for each dimmer.

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- dimmer must be used. A standard 2-way switch must be used for the other position.
- With the push on/push off type of dimmer, as long as the rotary control knob is not turned, when it is pressed, the dimmer will switch on at the previously set light level. This is also true in the two-way set up described above and shown in **Figure 2**, even when operated by the remote switch.
- To avoid damage to the dimmer, do not operate outside its maximum and minimum wattage limits. These limits are given on the rear of the dimmer, on the packaging and in the Specification section below.
- A thermal cutout is incorporated in each dimmer, which will switch off in the event of an overload.
- If this happens, the overload must be removed or once the cutout has cooled, the lights will come on again. The lights will continue to go on and off in this way until the overload is removed.
- The dimmers should not be installed where an ambient temperature is outside the 0°C & 40°C limits.
- **NOTE:** It is normal for the front of the dimmer to become quite warm in use, the temperature reached being dependent upon the lamp load and the ambient temperature.

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INSTALLING THE DIMMER IN A ONE-WAY SITUATION

1. Please be sure that the general installation information is fully understood before attempting to install the new dimmer. Also be sure that the load it is intended to control is within the specification of the dimmer.
2. Please note; the colour codes used in the UK prior to April 2004 are as follows: -

Live = RED Neutral = BLACK

In all other areas of the EU, as well as new build installations in the UK after April 2004, the colour codes used are: -

Live = BROWN Neutral = BLUE

The first colour indicated in the following text will be that used prior to April 2004. The second colour, shown in brackets, is the colour used after April 2004.

3. Some products have the fixing screws clipped to the rear of the product. These should be unclipped before installing the product.
4. Ensure the mounting box is firmly fixed to the wall.
5. If replacing an existing dimmer or switch, always take careful note of the cables and terminal descriptions before

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removing the old unit. This should make it far easier to install the new dimmer.

6. A one-way installation is where simple on and off switching and dimming of one light, or a series of lights is required.
7. Strip back the outer cable sheath and trim the inner cables to the appropriate length.
8. Carefully strip the inner cable insulation to expose 8mm of the conductor.
9. All live conductors should have red (brown) sleeving. This is achieved by fitting a short length of sleeving over the end of any lead that has black (blue) insulation.
10. Ensure each wire is connected to the appropriate terminal, as shown in the typical diagram - **Figure 1**.
11. When an earth lead is installed, ensure it is connected to the terminal in the mounting box. A length of green/yellow sleeve must be fitted over all earth leads.
12. If the product has a metal front plate, an earth lead **MUST** be connected between the earth terminal on the dimmer and the earth terminal in the back box. Again a length of green/yellow sleeving must be used over the bare earth conductor.

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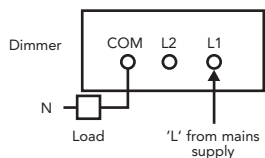


Figure 1 - typical one-way switch circuit

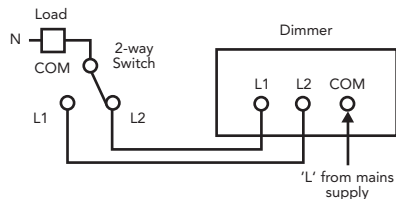


Figure 2 - typical two-way switch circuit
(1 dimmer only must be used)

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13. If an earth terminal is not present on the dimmer or mounting box and earth protection is not required, then any earth wire must be fully insulated by an appropriate means.
14. Carefully push the wired unit into the back box, ensuring cables are not trapped or pinched.
15. Using the screws provided, mount the dimmer onto the back box, making sure the screws are not over tightened so as to prevent damage or distortion to the front plate.
16. During tightening the mounting screws, adjust the front plate so that it is fitted square to the wall.

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CLEANING FRONT PLATES

In order to protect the quality of the front plate surface finish, periodic cleaning should only consist of polishing with a dry lint free soft cloth. On no account should abrasive or domestic cleaners be used.

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INSTALLING THE DIMMER IN A TWO-WAY SITUATION

1. This type of installation is when a two-way dimmer switch is used in conjunction with an additional standard two-way switch, to allow control of one light, or a series of lights, from more than one position.
2. When the light circuit is operated from the additional standard 2-way switch, it will come on at the pre-set level, which is controlled by the position of the dimmer knob when it was last operated.
3. If replacing an old dimmer or switch, always take careful note of the cables and terminal descriptions before removing the old unit. (com., L1, L2 etc.) This should make it far easier to install the new dimmer.
3. Follow the installation instruction for a one-way switch as described in the previous section, except using the circuit shown in **Figure 2** for the terminal positions.



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