



# Instructions For Fitting VARILIGHT Safety Dimmerswitches



Thank you for choosing a VARILIGHT dimmerswitch. This dimmerswitch is designed for mains voltage lighting and can be used to dim VARILIGHT electronic transformers as well as VARILIGHT DigiFlux Dimmer Dimmable Energy-Saving Light Bulbs (see box on right). Only use on an electricity supply of 216-253 volts AC.

Dimmer Rating (As Shown on Rear of Dimmer)	Number of VARILIGHT Dimmer Dimmable DigiFlux EnergySaver+ Light Bulbs You Can Dim	
	1 Gang	2, 3 or 4 Gang (Per Gang)
Min. 40W; Max. 250W	1 to 5	1 to 2 (or 2 to 5) on all gangs
Min. 60W; Max. 400W	2 to 10	2 to 10
Min. 100W; Max. 630W	Not suitable	Not suitable
Min. 200W; Max. 1000W	Not suitable	Not suitable

The maximum load stated on label is for mains incandescent lighting (eg. GLS lamps) or good quality UK supplied mains halogen bulbs (eg. GU10, G9 and similar HiSpot lamps). This dimmer can also be used to control VARILIGHT dimmable electronic transformers (the load is calculated by adding the wattages of the transformers, eg. 7 x 50W transformers = 350W and can be dimmed using a 400W dimmer). Always choose quality dimmable electronic transformers such as VARILIGHT transformers. For electronic transformers from other manufacturers we recommend a maximum of 5 electronic transformers per dimmer circuit. Noise levels may vary depending upon the type and quantity of transformers used.

**Do not use this dimmerswitch for LED lighting\*, wirewound low voltage lighting transformers, non-dimmable energy saving bulbs, fluorescent tubes or fans.** The dimmerswitch will eventually burn out if used for these applications. Incorrect use will make your guarantee invalid. Special VARILIGHT intelligent dimmerswitches are available for wirewound and electronic transformers for low voltage lighting from other manufacturers. VARILIGHT fan regulators are also available.

**\*For dimmable LED lighting choose from our V-Pro range of dimmerswitches (product codes begin with the letter J).**

### Loading Your Dimmer Correctly

Check the label on the back of your dimmerswitch before wiring it up. The label tells you the maximum load for the dimmer and also the minimum load. Dimmerswitches must not be overloaded or underloaded. If the dimmerswitch makes the lights flicker it is likely that it is underloaded. Calculating the load for each dimmerswitch module is easy. Just add up the wattages of all of the bulbs that the dimmerswitch module controls. (See table above on loadings for Dimmable Energy Saving Light Bulbs.

For optimum energy-saving it is recommended that the minimum load for any dimmerswitch is 100W. This way you will save more energy and still be able to dim the lights to the level that you want. Don't forget that the added advantage of a dimmerswitch is that it will also extend bulb life.

### Fitting Your Dimmerswitch

Read the instructions below carefully. Incorrect installation may damage the dimmer beyond repair. **In case of any doubt or difficulty consult a qualified electrician.**

1. Switch off at the mains, then remove the existing switch and disconnect the wiring from the switch terminals at the rear, taking note of the present wiring of the switch and the marking on the terminals. Where there are two or more wires together in the old switch, they must be kept together in the dimmerswitch.
2. Most models can be fitted into a box with a minimum depth of 16mm (25mm for low profile or flat face plates), i.e. a normal plaster depth flush box or a normal surface mounted switch box. A box having 4 fixing lugs cannot be used without modifying it. The top and bottom lugs must be broken off or bent flat.
3. To connect the wiring for 1-way circuits or for 2-way circuits refer to the diagrams overleaf under the heading "Typical Lighting Circuits". If you are using a dimmerswitch in a 2-way circuit then you can only use one dimmerswitch in the circuit (an ordinary switch must be at the other end) and that dimmerswitch must be a push-on/push-off model.\* Take care that no bare wires project out of the terminals. Keep wires together in a terminal if they were together in your old switch.
4. Dimmerswitches having a metal front plate must be earthed by means of the earthing point provided on the dimmer.
5. After connecting the wires screw the dimmerswitch gently into the wall box so that the front plate is not distorted or cracked. Do not trap the wiring between the rear of the dimmer and the back of the wall box.
6. Once installation is complete. Switch on the mains supply and switch on the dimmer, turning the control knob to give the desired light level.

A slight buzzing may be heard from the dimmerswitch in operation. This is quite normal.

\* Special VARILIGHT multi-way touch & remote dimmerswitches are available for dimming from more than one location.

### GUARANTEE

Important: In case of any defect return the dimmer to our service department. This guarantee is in addition to and not in derogation of the statutory rights of the purchaser and is offered so that you may have the benefit of our technical facilities. Should any defect occur in this unit within 12 months of its purchase we will replace or repair the defective unit free of charge provided that:-

- a) The unit has been correctly fitted according to the instructions and has not been used with non-dimmable fluorescent bulbs, non-dimmable energy saving bulbs, or overloaded beyond its rating, and has only been used on 200-250V A.C.
- b) The dimmer module has not been tampered with or taken apart. However for your convenience it is perfectly in order to remove a faulty dimmer module from multi-gang dimmers by pulling off the knob and unscrewing the nut under the knob. You will then still have the remaining modules working whilst we service your faulty module.
- c) The unit is securely packed and safely returned to:-

**Service Department, Carylls Lea, Faygate, Horsham, West Sussex, RH12 4SJ** (Tel. (01293) 851584) together with a letter stating the guarantee registration number below, the date and place of purchase, the type and wattage of the lighting or other load being controlled and the details of the fault.

**GUARANTEE REGISTRATION NUMBER 554**

## Typical Lighting Circuits

There are two basic types of lighting circuit, so make sure you have the correct dimmerswitch for your lighting circuit.

### 1. 1-Way Circuits

In 1-way lighting circuits the light or lights are controlled by one switch. Your dimmerswitch replaces this switch and can be a 1-way rotary model (Figure 1), or a 1 or 2 way push-on/push-off model (Figure 2).

(The advantage of a push-on/push-off dimmerswitch is that the dimmer can be switched on and off with a push action, while keeping the lighting at the level you have chosen.)

Remove your old switch and copy the wiring configuration for the dimmerswitch. The wires from your old switch can be connected either way round to the "C" and "L1" terminals of the dimmerswitch. If you are using a push-on/push-off dimmerswitch there is a spare terminal (L2) that you will not need to use for a 1-way circuit.

### 2. 2-Way Circuits

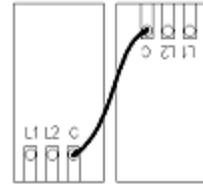
2-way lighting circuits have two switches turning the same light or lights on and off from two different locations (e.g.. at the top and bottom of the stairs). You must only replace **one** of these switches with a dimmerswitch or the lights will flicker. See Figures 3 and 4 which show typical 2-way circuits. Remove your old switch and copy the wiring configuration for the dimmer.

Remove your old switch and copy the wiring configuration for your dimmerswitch. The wire(s) fitted in the "common" terminal of the old switch should be fitted into the "C" terminal of the dimmerswitch. The wires fitted into the other two terminals of the old switch should be fitted either way round into terminals "L1" and "L2" of the dimmerswitch.

**Note:** Dimmer switches have "C" next to "L1" & "L2" whereas most switches have "C" at the opposite end to "L1" & "L2".

### Multi-Gang Dimmerswitches (with 2, 3 or 4 control knobs)

To fit multi-gang dimmerswitches treat each group of terminals at the back of the unit as a separate dimmerswitch wiring them into the lighting circuits as described above. If required, one terminal from each dimmer module may be joined together with a short length of wire to copy the wiring configuration of the old switch.

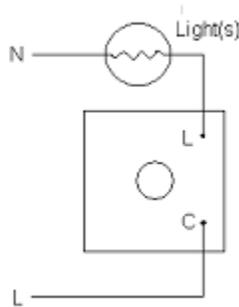


### Wiring Diagrams

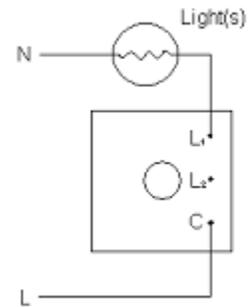
#### Typical 1-way Circuits

(For single dimmerswitches or each module of a multi-gang dimmerswitch)

**Figure 1**  
Using a 1-way Dimmerswitch



**Figure 2**  
Using a 1 or 2-way Dimmerswitch



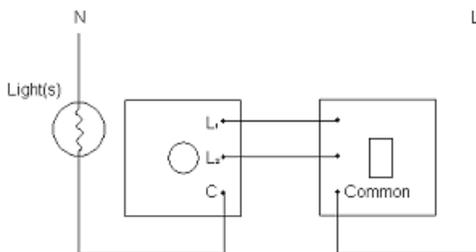
Reconnect the wires either way round to the "C" terminal and the "L1" terminal.

Reconnect the wires either way round to the "C" terminal and the "L1" terminal.

### Typical 2-way Circuits

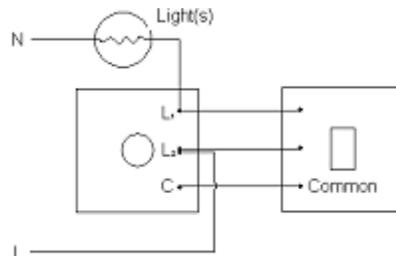
(For single dimmerswitches or each module of a multi-gang dimmerswitch)

**Figure 3**  
Using a 2-way Dimmerswitch



Dimmer must replace only one of the 2-way switches

**Figure 4**  
Using a 2-way Dimmerswitch



Dimmer must replace only one of the 2-way switches