

Instructions For Fitting VARILIGHT Intelligent Safety Dimmerswitches

Thank you for choosing a **VARILIGHT** intelligent safety dimmerswitch designed for all incandescent lighting circuits (including low voltage transformer circuits). Use only on an electricity supply of 200-250 volts AC.

This dimmerswitch complies with European Safety Regulations (IEC 669-2-1 or BSEN 60669-2-1) when used in lighting circuits containing MCBs (miniature circuit breakers). These can be rated at 6A, 10A or 16A (preferably 6A for lighting circuits). Your guarantee is not affected if you have an older lighting circuit protected by fuse wire links.

Applications:

Your **VARILIGHT** intelligent safety dimmerswitch is suitable for:-

*Mains voltage incandescent bulbs (eg. GLS).... load as per label, adding the wattages of the bulbs the dimmer will control;

*Good quality mains voltage halogen bulbs..... load as per label, adding the wattages of the bulbs the dimmer will control;

*Electronic low voltage lighting transformers and wire-wound low voltage lighting transformers.... de-rate by 20%, **adding the VA ratings of the transformers, not the wattages of the bulbs**, eg. load a 400W/VA dimmer up to 320W/VA; load a 300W/VA dimmer up to 240W/VA.

Do not use this dimmerswitch for fluorescent bulbs or energy saving bulbs or fans. The dimmerswitch will eventually be damaged beyond repair if used for these applications. Incorrect use will make your guarantee invalid.

Troubleshooting:

Dimmers must not be overloaded or underloaded. Check the label on the back of your dimmerswitch for the maximum ratings of each module and adjust this if necessary according to the load type (see above). The minimum loads for each are also shown on the label.

When using this dimmerswitch to control low voltage lighting transformers, **choose transformers with a maximum rating close to the rating of the bulbs they supply** (eg. Use a 60VA transformer to control a 50W low voltage bulb). **Do not** overload the transformers. Due to the high capacitance of the load presented by some electronic transformers no more than 5 transformers per dimmer-module circuit are allowed.

Note: Certain transformers **may not behave according to their power rating when used with a dimmer**. An overload will always result in the safety features of this dimmerswitch turning down the brightness. If this happens and you have followed these instructions then it is likely that your transformers present a bigger load. In this case, change your transformers to ones which do not appear as an overload, remove one (or some) transformer(s) from the circuit or choose a higher rated dimmer instead.

Fitting your dimmer:

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. Ensure that any wall box is free of plaster lumps or projecting screw heads. Dimmerswitches on single-sized plates can be fitted to wall boxes having 60.3mm screw fixing centres and those with double-sized plates to wall boxes with 120.6mm fixing centres. Most models can be fitted into a box with a minimum depth of 25mm. 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 or 2-way circuits refer to the diagrams overleaf under the heading "Typical Lighting Circuits". 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 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.

Typical Lighting Circuits

Your **VARILIGHT** intelligent safety dimmerswitch is suitable for 1-way or 2-way lighting circuits. It has a push on/push off action to switch and a rotary action to dim. There are 3 screw terminals per module.

1-Way Circuits

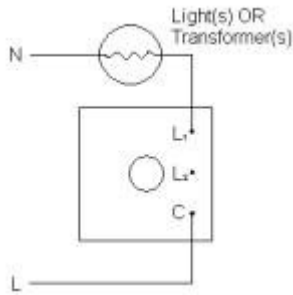
In 1-way lighting circuits each light is controlled by one switch. Your dimmerswitch should replace this switch. See Figure 1. Remove your old switch and copy the wiring configuration for your dimmerswitch. Connect wires either way round to the 'C' terminal and one of the 'L' terminals. The other 'L' terminal is not used in a 1-way circuit.

To fit 2 gang (or 3 or 4 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.

Typical 1-way Circuits

(For single dimmerswitches or each module of

Figure 1 Using a 1 or 2-way Dimmerswitch



2-Way Circuits

2-way lighting circuits have two switches turning the same lights on and off from 2 different locations (eg. 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 2 and 3 which show typical 2-way circuits. Remove your old switch and copy the wiring configuration for the dimmer.

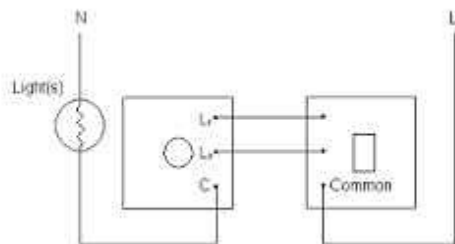
The wire(s) fitted in the "common" terminal of the old switch should be fitted into the "C" terminal of the dimmerswitch. The wires fitted into the other two terminals of the old switch should be fitted either way round into terminals "L1" and "L2" of the dimmerswitch.

Typical 2-way Circuits

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

Figure 2

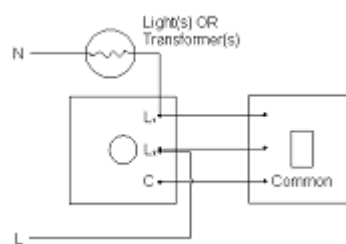
Using a 2-way Dimmerswitch



Dimmer must replace only one of the 2-way switches

Figure 3

Using a 2-way



Dimmer must replace only of the 2-