DO NOT DISCARD THESE INSTRUCTIONS
PLEASE KEEP FOR FUTURE REFERENCE

www.varilight.co.uk

Please **record the batch number** printed on the side of the plastic moulding on the rear of the product. This will assist us in providing any technical support you may require.

BATCH NO:

K_P

Reg. 423

VARILIGHT V-Com Dimmerswitches

Thank you for choosing a **VARILIGHT V-Com** intelligent programmable dimmerswitch. Use only on an electricity supply of 200-250 volts 50Hz AC.

IMPORTANT: Read *"Loading Advice"* section overleaf before installing this dimmerswitch.

V-Com dimmers are leading-edge and suitable for most types of lighting, including many dimmable LEDs. To optimise the dimming range for LED lighting in particular the minimum brightness setting of the dimmer can be adjusted [see *"Adjusting the Minimum Brightness"* below].

This product 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.

OVERLOAD PROTECTION:
This dimmerswitch is protected against overheating. If an overload occurs the dimmer will turn the lights down, then up and down again to indicate there is a problem. Then the dimmer will **automatically turn off** until the overload is removed and the dimmerswitch is switched off and then switched back on again. However, if the dimmerswitch receives a total short-circuit it may be damaged beyond repair.

WARNING:
Do not apply products with metal faceplates directly to freshly plastered or damp surfaces as product may tarnish. If in doubt, use polythene as a temporary gasket to protect the product. Do not use masking tape on metal faceplates.

FITTING YOUR DIMMERSWITCH:

Read these instructions 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.

OPTIMISING THE PERFORMANCE OF YOUR DIMMERSWITCH

The minimum brightness setting of the dimmer can be adjusted to achieve the optimum dimming range for a particular load as follows. (You may also need to refer to these instructions if you change your lights to a different type at a later date so please keep them for reference).

Adjusting the minimum brightness

If your lights are flickering when they are dimmed to a low level you can increase the minimum brightness setting of the dimmer, which may prevent this from happening. If the lights are brighter than you would like when the dimmer is set to minimum, you can try reducing the minimum brightness setting of the dimmer.

1. Switch on and set the dimmer knob to the MINIMUM position (turn fully anti-clockwise).
2. Press to turn the lights off and back on again at least 3 times [OFF–ON x 3], leaving approximately one second between presses.
3. The lights will step up and down in brightness, then go off, to show that the dimmer is in CONFIGURATION MODE.
4. Turn the knob fully clockwise. The lights will come on and allow you to adjust the minimum brightness.
5. Adjust the brightness that you are happy with as the minimum. Leave the dimmer in this position.
6. After 3 seconds the dimmer will notice that you have stopped adjusting the minimum. The lights will step up and down in brightness to show that the dimmer has returned to normal operation.
7. Continue to use the dimmer as normal, with your new minimum brightness.

Resetting the dimmer

If you change your lights you can reset the dimmer to the factory default minimum brightness setting.

1. Switch on and set the dimmer knob to the MAXIMUM position.
2. Press to turn the lights off and back on again at least 6 times [OFF–ON x 6], leaving approximately one second between presses.
3. The dimmer will reset all its settings to factory defaults. The lights will come on, then fade away to off.
4. The minimum brightness setting will be reset to the factory default.
5. Continue to use the dimmer as normal.

GUARANTEE

In case of any defect, return the dimmer to our service department. Varilight undertakes to repair or replace, at its discretion, goods which have become defective within 12 months of purchase, solely as a result of faulty materials and workmanship, provided that:-
a) The unit has been correctly fitted according to the instructions and has not been used with an incompatible load, fluorescent tubes, or overloaded beyond its rating, and has only been used on a 200-250V 50Hz a.c. power supply.
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.
This guarantee states Varilight's entire liability, which does not extend to cover consequential loss or damage or installation costs arising from a defective product. The guarantee does not apply to problems arising from any incompatibility between your lamps and the dimmer switch. This guarantee does not in any way affect the statutory rights of the purchaser and is offered so that you may have the benefit of our technical facilities.

GUARANTEE REGISTRATION NUMBER: 423

TYPICAL LIGHTING CIRCUITS

Your **VARILIGHT V-Com** intelligent 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

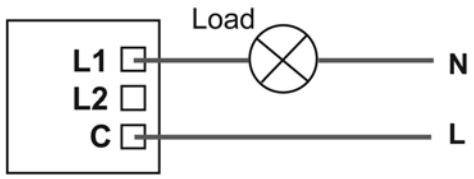
In 1-way lighting circuits each light is controlled by one switch. Your dimmerswitch should replace this switch. See Figure 1. Remove your old switch and copy the wiring configuration for your dimmerswitch. Connect wires either way round to the 'C' terminal and one of the 'L' terminals. The other 'L'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

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.

Typical 1-way Circuits
(For single dimmerswitches or each module of a multi-gang dimmerswitch)

Figure 1.
Using a 1 or 2-way 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.

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.

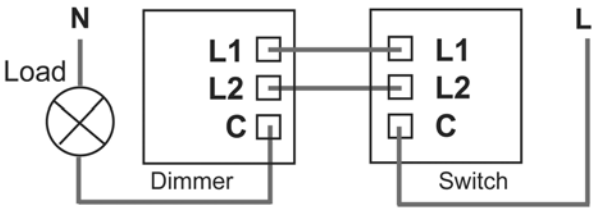
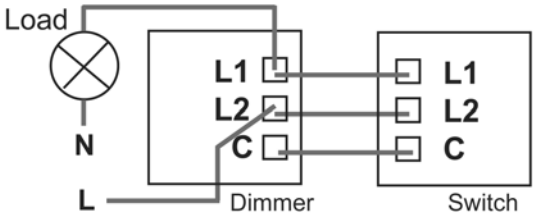


Figure 3. Using a 2-way Dimmerswitch.
Dimmer must replace only one of the 2-way switches



MULTI-GANG DIMMERSWITCHES

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.

COMPATIBILITY AND LOADING ADVICE

THIS SWITCH IS **NOT** SUITABLE FOR
✘ Fluorescent bulbs and tubes;
✘ Electric motors.

THIS SWITCH IS SUITABLE FOR
✓ Most dimmable LEDs [*see "Dimmable LEDs" box*];
✓ Good quality dimmable low voltage transformers [*see "Transformers" box*]
✓ GU10 or similar good quality mains halogen bulbs;
✓ Mains voltage incandescent GLS or candle-shaped bulbs.

Always observe the recommended minimum and maximum loads stated on the dimmer. Please see varilight.co.uk/v-com.html for the latest loading guidance. [*see "Overload Protection"box overleaf*]

Lighting Type	**V-Com** Grid Dimmer Push-On/Off	**V-Com** Standard Dimmer Push On/Off			
	Multi-Gang Per Gang	1-Gang	2-Gang Per Gang	3-Gang Per Gang	4-Gang Per Gang
Incandescent Mains Halogen Low Voltage Halogen Eco Halogen	As per rating on dimmer	As per rating on dimmer	As per rating on dimmer	As per rating on dimmer	As per rating on dimmer
Dimmable LEDs	**Minimum load: as per rating on dimmer.** Maximum load 180W: **Maximum number of LEDs permitted is 24** Maximum load 220W: **Maximum number of LEDs permitted is 30** Maximum load 300W: **Maximum number of LEDs permitted is 36** Maximum load 400W: **Maximum number of LEDs permitted is 40** [See additional information in *"Dimmable LEDs"* box on the right]				

TRANSFORMERS:

Use only with quality dimmable transformers. For optimum performance choose VARILIGHT transformers

To calculate load, add the VA ratings of the **transformers** (**not** the wattage of the bulbs). Choose transformers with a maximum rating close to their lamp load (e.g. Use a 50VA, 60VA or 70VA transformer to control a 50W low voltage bulb).

N.B. Certain transformers **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. If so, change your transformer(s) (VARILIGHT transformer(s) recommended); or remove one (or some) transformer(s) from the circuit; or choose a higher rated dimmer.

DIMMABLE LEDs

Always choose LEDs that are described as "dimmable" and for the best performance choose dimmable LEDs from established brands. We cannot guarantee that all LEDs labelled as "dimmable" can actually be dimmed satisfactorily. Therefore we recommend contacting the lamp supplier to confirm compatibility.