# INSTRUCTIONS FOR VARILIGHT V-PLUS IR DIMMERSWITCHES

### **OVERVIEW**

Thank you for choosing a VARILIGHT V-Plus series dimmerswitch, designed for all incandescent lighting circuits (including mains or low voltage halogen). Use only on an electricity supply of 230 volts AC.

V-Plus dimmers are recommended for use with halogen loads. The soft-start feature gently increases the power supplied to a lamp when the dimmer is first turned on, allowing the lamp to warm up gradually, reducing failures caused by stress on halogen lamps when they are switched on.

**IMPORTANT:** Read ALL sections below before installing this dimmerswitch.

This dimmer is suitable for 1-way circuits. For 2-way (or Multi-Way switching) use this Master Unit with any number of VARILIGHT Dimming Slaves. N.B. This unit cannot be used in conjunction with conventional switches in a 2-way circuit.

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.

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# LOADING

Maximum loads for V-Plus IR dimmerswitches;

Always observe the recommended maximum load.

Dimmer Series Lighting Type		<b>V-Plus IR</b> 2-Gang Per Gang	<b>V-Plus IR</b> 3-Gang Per Gang	<b>V-Plus IR</b> 4-Gang Per Gang
Incandescent				
Main Halogen	As per	As per	As per	As per
Low Voltage Halogen	loading on dimmer	loading on dimmer	loading on dimmer	loading on dimmer
Eco Halogen				

#### THIS SWITCH IS SUITABLE FOR

- ✓ Mains voltage Halogen, GLS or candle bulbs
- ✓ Good quality dimmable electronic low voltage transformers

# THIS SWITCH IS NOT SUITABLE FOR

- Fluorescent bulbs and tubes
- Wire-wound or toroidal transformers
- \* Electric motors
- Dimmable LED Lighting for dimmable LED Lighting select a dimmer from the V-PRO series

#### TRANSFORMERS

Use only on quality dimmable Electronic 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 of this dimmer turning down the brightness. 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 instead.

\* If a transformer appears as a highly inductive load, e.g. Wirewound or toroidal transformers, the dimmer will not work. To protect itself it will turn off within 1 second. The dimmer will allow this to happen 3 times before locking further use until it is disconnected and reconnected to the mains electricity.



#### 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:

**INSTALLERS** – Please leave these instructions with your customer for future reference.

# LOADING (Continued)

#### OVERLOADING AND UNDERLOADING

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.

#### OVERLOAD PROTECTION

As a safety feature, this dimmer is protected against overload and overheating. (NB. Some types of bulb can draw more current as they age and overload the dimmer). If the dimmer becomes too hot, it will attempt to handle the overload by reducing the brightness of the lamps. If it is unable to do so the dimmer will automatically turn the lights off until the overload is removed and the dimmer is switched off and then switched back on again.

## FREQUENTLY ASKED QUESTIONS

For FAQs, please visit: www.varilight.co.uk/faqs

### **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 10 years 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 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 either address listed in the overview section above, together with a letter stating the guarantee registration number below, the date and place of purchase, your contact details and return address, 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.

In many cases products don't need replacing, so for further information and help with troubleshooting, see our FAQ page at <u>www.varilight.co.uk/faqs</u>, or contact our Customer Services by calling +44 (01293) 223333 or create a support ticket at <u>www.varilight.co.uk/help</u>.

#### **GUARANTEE REGISTRATION NUMBER: 1007**

## FITTING YOUR DIMMER

Read the instructions below carefully before beginning. In case of any doubt or difficulty consult a qualified electrician.

- 1. Switch off at the mains.
- 2. 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 dimmer.
- 3. Check that you have a genuine live feed as well as load wire(s) at the wall box (see wiring diagrams below).
- 4. Ensure that any wall box is free of plaster lumps or projecting screw heads. Use a box with a minimum depth of 35mm for touch/remote dimmers in our Ultraflat and Screwless ranges. For other ranges a box depth of 25mm is sufficient. Please note, a box having 4 fixing lugs cannot be used without modifying it. The top and bottom lugs must be broken off or bent flat.
- 5. To connect the wiring, refer to the diagrams below. Dimmers with a metal front plate must be earthed by means of the earthing point on the faceplate. You must ensure that all wires are sleeved fully and only enough bare wire is showing to connect to the terminals. Push wires deep into terminals and tighten terminal screws so that wires are held securely. No bare wires should protrude from the terminals
- After connecting the wires, screw the dimmer gently into the wall box. Do not trap the wiring between the rear of the dimmer and the back of the wall box.
- 7. Turn on the mains electricity.

**Important:** Disconnect the dimmer before carrying out insulation resistance testing. Failing to do so could damage a dimmer and make the guarantee invalid.

# **OPERATION OF THE SWITCH**

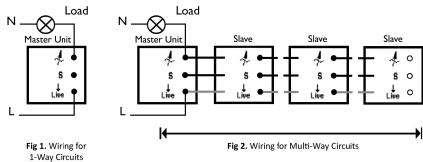
To initialize the dimmer, touch the circular "sensor" on the front of the plate once for 2 seconds. The dimmer will respond by making the light(s) brighter. A single touch will now turn the light(s) on or off. To dim the lights, keep contact with the sensor until the desired light level is reached. While contact with the sensor is maintained, the brightness will cycle up and down. To change the direction of the dimming cycle, remove contact and then touch the sensor again. When the brightness reaches the level you require, remove contact with the sensor.

# 1-WAY, 2-WAY OR MULTI-WAY CIRCUITS

In 1-way lighting circuits the light(s) are controlled by one switch. This dimmer should replace that switch. The live wire must be connected to the terminal marked "Live↓" and the "load" wire to the terminal marked " <sup>#</sup>. [See Figure 1]

For 2-way or Multi-way circuits (where the light(s) are controlled by more than one switch) use this dimmer and any number of VARILIGHT dimming slaves (total cable length from the master to the last slave should be no more than 50m) following the wiring diagrams below. It is not possible to use a conventional switch in combination with this type of dimmer. [See Figure 2 and 3]

To fit 2, 3 or 4-gang dimmers treat each group of terminals at the back of the unit as a separate dimmer, wiring them into the lighting circuits as above. You may need a short length of wire to connect together the "Live $\downarrow$ " terminals.



## **REMOTE CONTROL HANDSET**

Remote Control Dimmers are pre-programmed to respond to button 1 and button 8 on the VARILIGHT remote control handset (YRC8 - purchased separately). Alternatively, dimmers can be re-programmed to respond to any other button (2 to 7) on the VARILIGHT remote control handset (do not omit step 3):-

- 1. To set the dimmer into learning mode, after it is initialized, tap the sensor 6 times, roughly once per second (each tap causes the light(s) to turn on or off). After 6 taps on the sensor the lights will step up and down once and go off.
- 2. Within 15 seconds and from a distance of less than 1 metre (3 feet) away, pointing directly at the "eye", press and release your chosen button on the remote control handset. The light(s) will turn on and turn off.
- 3. To confirm your choice, press and release the same button on the remote control handset again. If the programming has been successful, the light(s) will turn on and turn off. The lights then step up and down once to confirm. Try controlling the dimmer with the remote control. If it does not respond, return to step 1 above and try again. If the problem persists, try a different button, a different remote control unit or purchase the dedicated VARILIGHT controller.
- 4. You can now use this button on the remote control to operate the dimmer. As with the touch sensor, a single touch on the remote control button will turn the light(s) on and off. Holding the button down will make the brightness cycle up and down. To change the direction of the dimming cycle remove contact and then press the button again. Release contact from the button when the desired light level is reached. The dimmer can still be operated using the touch sensor.
- 5. For 2- gang models, repeat steps 1 to 4 for each sensor, teaching each one a different button so you can control each one separately. You can change your choice of control button by following steps 1 to 4 again at any time.

#### **RESTORE FACTORY SETTINGS**

Follow step 1 above. Press and hold the touch button on the dimmer for at least 4 seconds. The light will then come on and fade to off to signal that the dimmer has been reset to its factory settings.

**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.

