

# INSTRUCTIONS FOR VARILIGHT V-PRO IR DIMMERSWITCHES



## OVERVIEW

Thank you for choosing a VARILIGHT V-Pro IR intelligent programmable touch/remote control dimmerswitch. Use only on an electricity supply of 230 volts AC.

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

The V-Pro IR master dimmer is suitable for 1-way circuits. For 2-way (or multi-way) circuits, use a V-Pro IR master dimmer with one or more dimming slave units. V-Pro IR touch/remote dimmers cannot be used in conjunction with conventional switches in a 2-way circuit. Use only on an electricity supply of 230V~.

Dimming slaves are touch control only. Remote control is only possible for the master unit.

This product complies with **European Safety Regulations** (IEC 669-2-1 or BSEN60669-2-1) 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-Pro IR dimmerswitches (please see [www.varilight.co.uk](http://www.varilight.co.uk) for latest loading advice);

**Always observe the recommended maximum load.**

Dimmer Series	V-Pro IR 1 Gang	V-Pro IR 2 Gang	V-Pro IR 3 Gang	V-Pro IR 4 Gang
Lighting Load	Max. Load	Max. Load Per Gang	Max. Load Per Gang	Max. Load Per Gang
Dimmable Mains & Low Voltage LEDs	1 to 10 Dimmable LEDs (max. 100W) Check your LED lamps are suitable for use with dimmers that have a standby mode. A load regulator may be required, e.g. Varilight Glowfix			

### THIS SWITCH IS SUITABLE FOR

- ✓ Most dimmable LEDs
- ✓ Dimmable CFLs (Use Mode 3)

### THIS SWITCH IS NOT SUITABLE FOR:

- ✗ Non-dimmable fluorescent bulbs and tubes;
- ✗ Wire-wound or toroidal transformers;
- ✗ Electric motors

### OVERLOAD PROTECTION:

This dimmerswitch is protected against overload. If an overload occurs it 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.

### TRANSFORMERS

Use only with 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 (eg. 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 dimmer turning itself off. If this happens, 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. Wire-wound or toroidal transformers, the dimmer will not work. To protect itself it will turn off within 1 second.

### ADVICE ON CHANGING LIGHT BULBS

Always turn off the mains power when light bulbs controlled by your V-Pro IR dimmers are replaced. If you change the type of light bulb then restore factory settings as described under "Programming".

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

[www.varilight.co.uk](http://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.

I J I

Reg. IJ009

BATCH NO:

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

## FREQUENTLY ASKED QUESTIONS

For FAQs, please visit: [www.varilight.co.uk/faqs](http://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.

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 [www.varilight.co.uk/faqs](http://www.varilight.co.uk/faqs), or contact our Customer Services by calling +44(0)1293) 223333 or create a support ticket at [www.varilight.co.uk/help](http://www.varilight.co.uk/help).

**GUARANTEE REGISTRATION NUMBER IJ009.**

## 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. 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. Dimmers can be fitted into a box with a minimum depth of 25mm for Classic plated products, or 35mm for Ultraflat and Screwless. 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 below under the heading "1-Way, 2-Way and Multi-Way 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 plate must be earthed by means of the earthing point on the faceplate.

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.

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

## PROGRAMMING

### OPTIMISING THE PERFORMANCE OF YOUR DIMMERSWITCH

#### A. CHOOSE THE CORRECT DRIVING MODE

- **MODE 1:** When you first install the dimmer switch it will automatically default to trailing-edge mode. This mode is the best one for most types of lighting. For certain lighting loads you may be able to improve the dimming performance by changing to:-
- **MODE 2:** Leading-edge mode for some LED lamps
- **MODE 3:** DigiFlux® mode for DigiFlux® Dimmable CFLs and some external LED drivers

#### B. CHANGING THE DRIVING MODE

1. Switch on, then press and hold the touch button on the dimmer for 15 seconds. During this time the lights will cycle up and down. After 15 seconds the lights will turn off.
2. To select **MODE 2**, press the touch button 4 times (each press causes the light(s) to turn off/on)  
**OR** To select **MODE 3**, press the touch button 6 times (each press causes the light(s) to turn off/on)  
**OR** To select **MODE 1**, press the touch button 2 times (each press causes the light(s) to turn off/on)
3. The lights will flash once, twice or three times to confirm the mode that has been selected.

#### C. ADJUSTING THE MINIMUM BRIGHTNESS (to utilise the full dimming range of your lights)

Tap the touch button 6 times, roughly once per second (each tap causes the light(s) to turn on or off). After 6 taps, wait until the lights step up and down and then go off. Then tap the touch button 6 more times. The lights will come on at a medium brightness and step down to show the 8 brightness settings you can choose as your minimum. Each further tap steps through the 8 settings available in sequence. At your chosen brightness, usually the lowest brightness setting where the lights do not flicker, stop tapping the button. After 5 seconds the dimmer will step the lights up and down to confirm it has saved this setting.

#### D. RESTORE TO FACTORY SETTINGS

To restore factory settings tap the touch button 6 times, roughly once per second (each tap causes the light(s) to turn on or off). After 6 taps on the button the lights will step up and down and go off. Press and hold the touch button for at least 5 seconds. The lights will then come on and fade to off to signal that the dimmer has been reset to factory settings.

## 1-WAY, 2-WAY AND 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 "LOAD". To fit 2, 3 or 4-gang dimmers treat each group of terminals at the back of the unit as a separate dimmer. You may also need a short length of wire to connect together the "LIVE" terminals if only one live wire is present.

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. Follow the same wiring as for 1-way circuits with three (or two) wires linking each slave using the "LOAD" terminal, "SLAVE" terminal and "LIVE" terminal. For more information please refer to the wiring diagrams above.

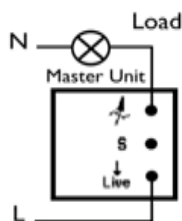


Fig 1. Wiring for 1-Way Circuits

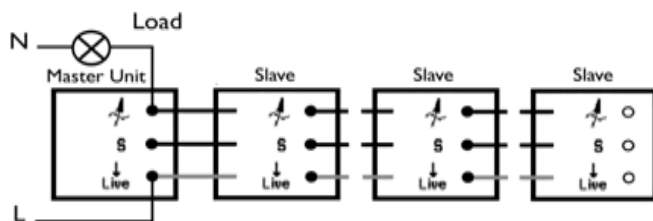


Fig 2. Wiring for Multi-Way Circuits

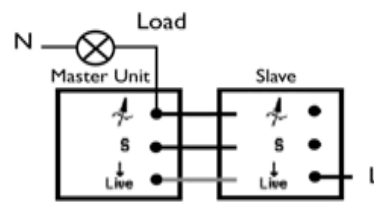


Fig 3. Alternative Wiring for Multi-Way Circuits

## REMOTE CONTROL HANDSET

### PROGRAMMING DIMMER TO RESPOND TO A REMOTE CONTROL HANDSET

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

1. To set the dimmer into learning mode tap the button 6 times, roughly once per second (each tap causes the light(s) to turn on or off). After 6 taps on the button the lights will step up and down and go off.
2. Within 15 seconds and from a distance of less than 1 metre (3 feet) away, pointing directly at the button on the dimmer, briefly press the chosen button on the handset. The light(s) will turn on and turn off.
3. To confirm your choice, briefly press the same button 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 button, 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 button.
5. For 2- gang models, repeat steps 1 to 4 for each button, 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.

#### USING A REMOTE CONTROL HANDSET

On a remote control handset change the direction of the dimming cycle by releasing and then pressing the button again. Turn the lights on or off with a short press of the button.

##### 1. Using the standard VARILIGHT YRC8 handset

Our standard handset allows control of up to 7 dimmers. Button 8 can be used to turn all the lights on or off. The dimmers will remember the level they were at when switched off and so the previous light levels can be recalled using button 8.

##### 2. Choose the VARILIGHT YRE8 handset for enhanced lighting control

- Control up to 4 lighting circuits from a numbered button
- Turn all the lights on or off using a master button
- Lightscene™ - Combine different light levels in separate circuits to create a lighting scene (e.g. for dining, reading, movies, etc.)
- Save your 4 favourite lighting scenes and recall any one at any time

