

MULTI LOCATION PRIMARY AND SECONDARY DIMMERS

Product features

- Enables dimming from 1, 2 or 3 locations. Where lights are controlled from 2 or 3 positions, use 1 primary module with 1 or 2 secondary modules for rotary dimming from each position.
- Suitable for most dimmable LEDs. 1-10 LED bulbs totalling max 120 watts on the same circuit.
- Intelligent Dimming Technology, programmable to suit multiple configurations and bulb types.
- Softstart feature and overload protection.
- Adjustable minimum brightness setting and choice of driving modes.
- Industry-leading V-Pro dimming technology.
- Simply replace existing switches with no additional wiring required.
- Available in all Heritage Brass electrical ranges.

This switch is suitable for

- Most dimmable LEDs

This switch is NOT suitable for

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

Product Specification

- Operating Voltage: 230V 50Hz
- Maximum Load Rating: LED; 120W (Max. 10 lamps)
- Maximum Current Rating: 0.4A
- Terminal (Live) Diameter: 3.2mm; Capacity: 3 x 1.5mm²
- Module dimensions: 40x22x44mm
- Applicable Safety Standard: BS EN 60669-2-1

Wiring

- In 1-way lighting circuits, where the light(s) are controlled from 1 position only a Multi Location Primary dimmer is required. [See Figure 1 below]
- N.B. It is **not** possible to use standard light switches to control Multi Location Primary dimmers from a second or third location. Use either a Multi Location Secondary dimmer or retractive switch as described below.
- For 2 or 3-way circuits (where the light(s) are controlled from 2 or 3 locations) you can use one Multi Location Primary dimmer along with 1 or 2 Multi Location Secondary dimmer for rotary dimming from each position. Please note that the total cable length from the primary dimmer to the last secondary dimmer should be no more than 50m. No more than 2 secondary dimmers should be used with each primary dimmer. [See Figures 2, 3 & 4 below]
- For 2 or 3-way circuits (where the light(s) are controlled from 2 or 3 locations) there are also other options for secondary control. Instead of a Secondary Dimmer, you can also use one of the following types of switch with as a V-Pro Smart dimmer:
 1. Retractive Switches (Push-to-Make)

A quick press switches the light off or on at its last brightness. A long press makes the lights gently cycle up and down. If you stop pressing when the lights are dimming then the next long press will initially make the lights go brighter. Or if you stop pressing when the lights are brightening then the next long press will initially make the lights go dimmer.

2. Momentary Switches (Push-to-Make)

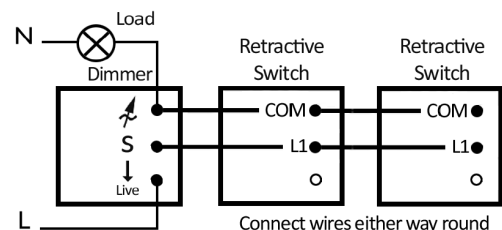
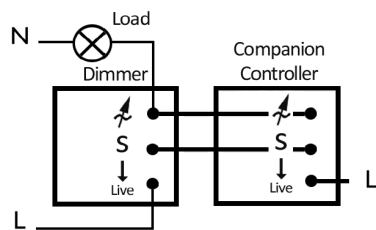
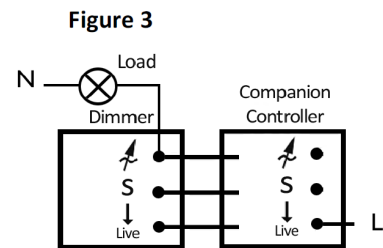
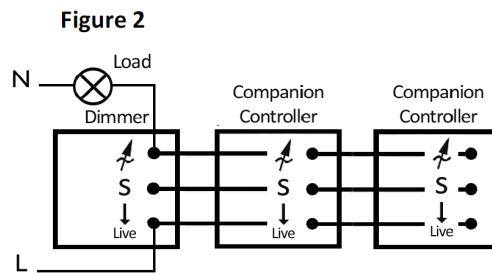
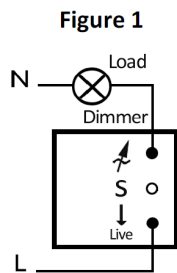
Same behaviour as Retractive Switches above.

For Retractive and Momentary Switches, follow the same wiring as for 1-way circuits with two wires linking to



each Retractive or Momentary Switch using the “LOAD” terminal and the “S-LINK” terminal. These two wires can connect either way round to the COM and L1 terminals on the Retractive Switch. [See Figure 5 below]

N.B. The dimmer will automatically sense which type of switch is being used for secondary control and adjust accordingly. If a secondary controller is replaced by a different type of switch a factory reset will be required so that the dimmer can make the necessary adjustments to its internal program.



INSTRUCTIONS FOR VARILIGHT V-PRO SMART DIMMERSWITCHES

OVERVIEW

Thank you for choosing a VARILIGHT V-Pro Smart intelligent programmable rotary control dimmerswitch.

IMPORTANT: Read ALL sections below before installing this dimmer switch.

The V-Pro Smartdimmer is suitable for 1-way circuits. For 2 or 3-Way circuits, use aV-Pro Smart dimmer with 1 or 2 companion controllers. Use only on an electricity supply of 230V~.

This product complies with **British and 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. **Doyle & Tratt Products Ltd**, Carylls Lea, Faygate, Horsham, West Sussex, RH12 4SJ, UK. +44 (0)1293 223333

Varilight Europe Kft, 2600 Vác, Althann Mihály Frigyes utca 2, Hungary.

LOADING

Maximum loads for V-Pro Smart dimmerswitches(please see www.varilight.co.uk for latest loading advice);

Always observe the recommended maximum load.

Dimmer Series	V-Pro Smart Max. Load Per Gang
Lighting Load	
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 LEDFix

THIS SWITCH IS SUITABLE FOR

- ✓ Most dimmable LEDs

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. Some 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 specifies Triac dimming, use a dimmer from the V-Com series.

* 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 Smart dimmers are replaced. If you change the type of light bulb then perform a factory reset as described under "Programming".

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.

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.

J_M

Reg. JM005

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

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 do not need replacing, so for further information and help with troubleshooting, see our FAQ page at 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.

GUARANTEE REGISTRATION NUMBER JM005.

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. Dimmer-switches 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.

3. To connect the wiring for 1-way, 2-way or 3-way circuits refer to the wiring diagrams, or the text under the heading "1-Way, 2-Way and 3-Way Circuits" on the other side of this leaflet. 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.

CONTROL TIPS



There are some extra functions of this dimmer that can be used alongside the regular push on/off and rotary dim controls.

A **sharp turn up** will set the lamps to **maximum brightness**, with a **sharp turn down** setting them to **minimum brightness**. Either of these can also be performed from off. Turning the dimmer **slowly in either direction** from off will bring the lamps on at **minimum brightness**, allowing you to ramp up from a very low level.

PROGRAMMING

You can change the settings of this dimmer with the control knob. The instructions are below:

Setting to change	How to change it
Adjust the minimum brightness	Set to minimum brightness and hold the button for 6 seconds . The lights will then come on and allow you to adjust the minimum brightness.*
Adjust the maximum brightness	Set to maximum and hold the button for 6 seconds . When the lights blink, use the rotary control to adjust the maximum brightness.*
Changing the driving mode	Turn the dimmer off and hold the button down for 6 seconds . The lights will pulse and go off. Press the dimmer once for mode 1 , twice for mode 2 , or three times for mode 3 . The default mode for this dimmer is mode 1 .
Setting the Boost level (explained below)	Turn the dimmer off and hold the button down for 12 seconds . Ignore the lights blinking at 6 seconds. The lights will then come on and allow you to set the boost level.*
Toggle the child lock function	Set to minimum and hold the button down for 12 seconds . Ignore the lights blinking at 6 seconds. If enabled, the lights will come on for 2 seconds and go off. If disabled the lights will flash twice and go off.
Factory reset	Set to maximum and hold the button down for 12 seconds . Ignore the lights blinking at 6 seconds then, after 12 seconds, the light will come on and fade to off.

*Once set, leave the dimmer for 3 seconds. The lights will flash to show the new level has been set, and the dimmer will return to normal operation.

Boost Function Explained

Some LED lights require a large amount of power to come on and so do not illuminate at low brightness levels. The Boost function caters for LED lights that require more power at start-up by raising the startup brightness level, then putting the brightness back to the specified level.

WIRING DIAGRAMS

Figure 1

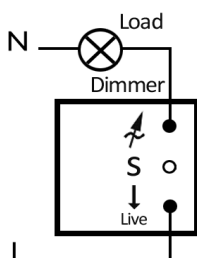


Figure 2

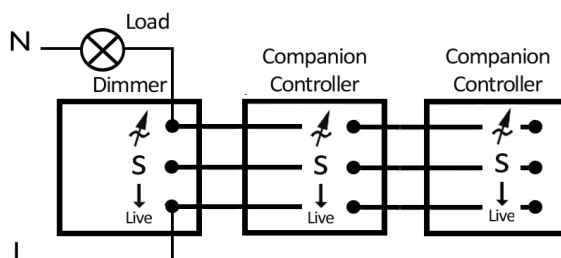


Figure 3

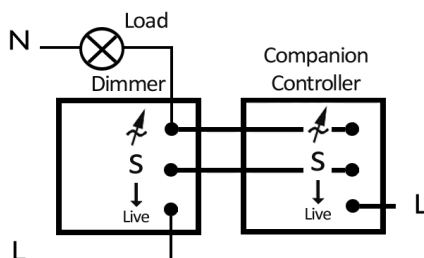
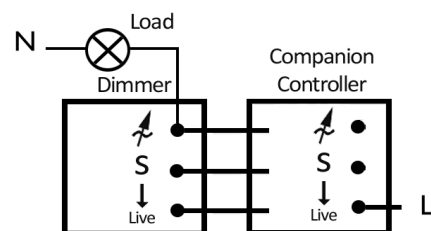


Figure 4

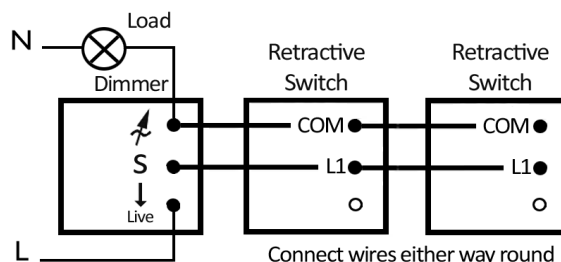


Figure 5

1-WAY, 2-WAY AND 3-WAY CIRCUITS

In **1-way** lighting circuits, where the light(s) are controlled from 1 position only a V-Pro Smart dimmer is required. [See Figure 1 below]

N.B. It is **not** possible to use standard light switches to control V-Pro Smart dimmers from a second or third location. Use either V-Pro Smart Companion Controllers or Retractive/Momentary Switches as described below.

For **2 or 3-way** circuits (where the light(s) are controlled from 2 or 3 locations) you can use one V-Pro Smart dimmer along with 1 or 2 V-Pro Smart **Companion Controllers** for rotary dimming from each position. Please note that the total cable length from the dimmer to the last Companion Controller should be no more than 50m. No more than 2 Companion Controllers should be used with each dimmer.

[See Figures 2, 3 & 4 below]

For 2 or 3-way circuits (where the light(s) are controlled from 2 or 3 positions) there are also other options for secondary control. Instead of a Companion Controller, you can also use one of the following types of switch with as a V-Pro Smart dimmer:

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A quick press switches the light off or on at its last brightness. A long press makes the lights gently cycle up and down. If you stop pressing when the lights are dimming then the next long press will initially make the lights go brighter. Or if you stop pressing when the lights are brightening then the next long press will initially make the lights go dimmer.
2. **Momentary Switches (Push-to-Make)**
Same behaviour as Retractive Switches above.

For Retractive and Momentary Switches, follow the same wiring as for 1-way circuits with two wires linking to each Retractive or Momentary Switch using the "LOAD" terminal and the "S-LINK" terminal. These two wires can connect either way round to the COM and L1 terminals on the Retractive Switch.

[See Figure 5 below]

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