www.varilight.co.uk

Economy/Security Intelligent Touch Safety Dimmers 1 Way

Thank you for choosing **VARILIGHT.** This dimmer is suitable for 1-Way Circuits only. Use only on an electricity supply of 200 to 250 volts a.c.. This dimmer features versatile trailing-edge control making it suitable for a wider range of applications.

THIS SWITCH IS SUITABLE FOR

- ✓ Mains voltage GLS bulbs;
- ✓ Most dimmable electronic low voltage transformers (including those requiring trailing-edge control) [*see "Transformers" box on the right*]:
- ✓ GU10 or similar HiSpot mains halogen bulbs
- ✓ Candle bulbs

Never exceed the recommended maximum load
[*see "Safety Features" box below*]

THIS SWITCH IS **NOT** SUITABLE FOR

- ✗ Fluorescent lights or compact fluorescent bulbs;
- ✗ Wire-wound or toroidal transformers;
- ✗ Electric motors or fans

TRANSFORMERS

Use only on dimmable **Electronic** Transformers

To calculate load, add the VA ratings of the **transformers** (**not** the wattage of the bulbs). There is an absolute maximum of 5 transformers on any dimmer circuit (**except** with **VARILIGHT LV Transformers** when you can add the bulb wattages up to the dimmer "max. load" and use up to 10 transformers). Choose transformers with a maximum rating close to their lamp load (eg. Use a 60VA transformer to control a 50W low voltage bulb); **except** with **VARILIGHT LV Transformers** when any lamp loading will work.

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 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. (This does not apply to VARILIGHT transformers.)

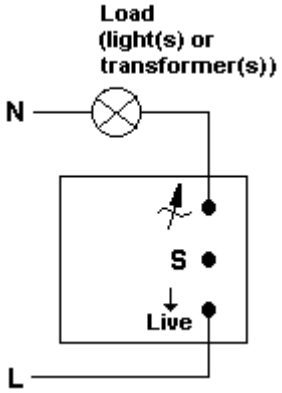
FITTING THE SWITCH

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. Ensure that any wall box is free of plaster lumps or projecting screw heads. Use 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.
4. To connect the wiring, refer to the diagram below. Dimmers with a metal front plate **must be earthed** by means of the earthing point on the dimmer. 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.
5. 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.
6. Turn on the mains electricity.

Your **VARILIGHT** Economy/Security Touch Dimmer is suitable for 1-way circuits. It **cannot** be used conjunction with another switch in a 2-way circuit. In 1-way lighting circuits each light is controlled by one switch. This dimmer replaces that switch. The live wire **must** be connected to the terminal marked "Liveo" and the "load" wire to the terminal marked "⏚". This means that the terminal marked "⏚" is connected directly to the light(s) (or transformers for low voltage lighting).

Figure 1. Wiring for 1-way circuits



SAFETY FEATURES:

This dimmer will protect itself against overload, short-circuit, over-temperature and over-voltage. To avoid these safety features turning the dimmer down or off, make sure you load the dimmer correctly by carefully reading the advise in this leaflet.

If a gross overload or short-circuit occurs the dimmer will **automatically turn off** until the overload or short-circuit is removed and the dimmer is switched on again.

Even if the dimmer is slightly overloaded it will react by turning down the brightness progressively. If it can find a comfortable operating level it will stay on with the light(s) at reduced brightness, otherwise it will switch off.

This dimmer should not be used on wire-wound transformers. If it is mistakenly connected to a wire-wound transformer the dimmer will warn the user by coming on at a low brightness for 2 seconds before switching off completely. N.B. To prevent damage to itself, the dimmer will only perform this warning 3 times. After this it will block further use until it is disconnected from and then re-connected to the mains electricity supply.

GUARANTEE

Important: In case of any defect return the dimmer to our service department. This guarantee is in addition to and not in derogation of the statutory rights of the purchaser and is offered so that you may have the benefit of our technical facilities. Should any defect occur in this unit within 12 months of its purchase we will replace or repair the defective unit free of charge provided that:-

a) The unit has been correctly fitted according to the instructions and has not been used with fluorescent bulbs, compact fluorescent bulbs, wire-wound transformers or electric motors, or overloaded beyond its rating, and has only been used on 200-250V AC.

b) The dimmer module has not been tampered with or taken apart.

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. **GUARANTEE REGISTRATION NUMBER 710b.**

OPERATION OF THE SWITCH

The first time you use it, initialise the dimmer by touching the circular "button" on the front of the plate once for 2 seconds.

This dimmer can be used as a normal touch dimmer (see (a) below) or programmed in one of two modes:-

1. In ECONOMY mode, after a time period you set, the lights will dim over 30 seconds to OFF. This mode repeats each time the light is left on until you reset to normal dimmer mode (see below).
2. In SECURITY mode the lights will come on at full brightness (or at the level you choose) after a time period you set and stay on for 5 hours before turning off (no dimming to off). At the end of the specified length of time the switch will become a normal dimmer if you touch the button. However, if you do not touch the button, the program will repeat every 24 hours (for example, while you are away on holiday).

(a) Touch Control

A single touch 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 remove contact and then touch the button again. When the brightness reaches the level you require, remove contact with the button

(b) Economy or Security Mode

To begin with (for either mode) you program the time period. To program, tap the button with your finger 6 times in quick succession (each tap causes the light(s) to turn on or off). After 6 taps, the lights will step up and down once and go off to indicate that you are in programming mode. You now have 5 seconds to start programming the length of time by tapping the button as follows:-

no touches	normal dimmer mode is resumed
1 touch	10 minutes
2 touches	20 minutes
3 touches	40 minutes
4 touches	1 hour
5 touches	2 hours
6 touches	3 hours
7 touches	4 hours
8 touches	6 hours
9 touches	8 hours
10 touches	10 hours

Keep these instructions safe.

Note: If the power to the dimmer is lost at any time (eg. during a power cut or the wiring is disconnected), the dimmer will revert to its factory setting and behave as a normal touch dimmer. It can be re-programmed by following these instructions again.

Electrical Contractors
Please leave these instructions with your customers.

In ECONOMY mode this is **how long the lights stay on.**
In SECURITY mode this is **how long before the lights come on** (for 5 hours).

After 3 seconds following the last touch, the brightness of the lamps will step up and down again to indicate the length of time is set. Now the switch is waiting to be told which mode you want.

1. To enter ECONOMY mode **touch once more** within the next 5 seconds.
   [Until you reset the switch, the switch will turn the lights off after the specified period counting each time from when you turn the lights on or adjust the brightness.]
2. To enter SECURITY mode **do nothing** for at least 5 seconds.
   [Counting begins now. You can leave the lights on and turn off later or tap the button now to turn the lights off. Neither action will affect the time period you have set. The lights will come on at full brightness unless you choose a lower brightness. You can choose a lower brightness anytime after the 5 seconds and during the specified time period before security switch-on. To do this, touch and hold the button to adjust the brightness, then tap the button to turn the lights off at any time. If you leave the lights on, they will stay on until the time-off period comes when the switch will turn them off. Remember: After the specified time, whether the lights have come on or have turned off after the 5 hours, if you touch the button then security mode will be switched off and normal dimmer mode resumed.]

c) Resetting to Normal Dimmer Mode

You can RESET to dimmer mode at any time with six short touches. The dimmer will respond by stepping the lights up and down then normal dimmer mode is resumed.

FREQUENTLY ASKED QUESTIONS

1. **Is it normal for the dimmer to be warm to the touch even when the lights are off?** A small current passes through the dimmer even when it is off to maintain its memory. This can cause the dimmer to feel warm to the touch.
2. **Should I be concerned if the dimmer is very warm during use?** The dimmer will become warm during use. The more lights the dimmer is controlling, the warmer it will become. On its maximum load the dimmer can become very warm. As long as you have not overloaded the dimmer, this is no cause for alarm.
3. **What happens if I have a power cut?** If for any reason the power is lost to the dimmer, the dimmer will be reset to its factory setting. Any settings you have applied to the dimmer will need to be re-programmed. *Keep these instructions safe so that you can use them again if this occurs.*
4. **Can this dimmer be used in 2-way circuits?** No, this is a 1 way dimmer. It cannot be used to control lights that are also controlled by another switch elsewhere.
5. **The touch button does not work properly.** This can be caused by the live and load wires being in the wrong terminals (see wiring diagram overleaf).
6. **The light(s) come(s) on dim for 2 seconds and then the lights go off.** This could be the dimmer warning you that it is connected to a wire-wound transformer(s). It **cannot** be used to control wire-wound transformers. (N.B. In this situation, the dimmer may block any further use until it is disconnected from the mains.) Either replace the transformer(s) with a dimmable electronic transformer(s) or use the dimmer elsewhere on a suitable load.
7. **The dimmer keeps turning the lights down.** The dimmer is doing this because it is overloaded. If it can find a comfortable operating level it will stay on with the light(s) at reduced brightness, otherwise it will switch off. One solution could be to use lower wattage bulbs or transformers to reduce the load. Otherwise use the dimmer elsewhere on a suitable load.
8. **The dimmer keeps turning itself off.** The dimmer is doing this for 1 of 3 reasons: (1) It is overloaded. One solution could be to use lower wattage bulbs or transformers to reduce the load. Otherwise use the dimmer elsewhere on a suitable load; (2) There is a short-circuit. Check your wiring or consult a qualified electrician; (3) It is sensing an unsuitable load such as a fan or wire-wound transformer. Either replace the transformer(s) with a dimmable electronic transformer(s) or use the dimmer elsewhere on a suitable load.