



# Wiring Accessories

## LED Dimmer Switch

Switchable – Leading/Trailing Edge

## Wiring Instructions

### 1. Power Off

Before commencing work always isolate the power at the consumer unit / fuse box.

\*Note – If your installation uses a four-lug metal mounting box, remove the top and bottom lugs or bend fully back.

### 2a. Replacing an existing accessory

1. Unscrew the accessory from the wall/mounting box.

2. Note the cable connections:

The illustration shows 1 wire of each colour connected to each terminal. There should be an additional connection between the mounting box earth terminal and the accessory earth terminal.

3. Unscrew each terminal to release the wire.

### 2b. New installation

1. Install mounting box (metal or moulded) for either flush or surface mounting, ensuring appropriate size of product.  
2. Select the most suitable entry point of the mounting box (knock-out) and route the cables through. If a metal box is used, a cable grommet should be fitted to the entry point.

3. Cables should be prepared so a sufficient conductor length reaches the terminals. Strip the ends of the individual conductors leaving an adequate length bare to enter terminals.

### 3. Connection (See diagram)

1. Line up the new accessory to mounting box and take note of where each terminal is located.

2. Connect each wire to the matching terminal.

An earth connection should always be made between the mounting box earth terminal and the accessory earth terminal, where fitted.

All bare earth wires must be sheathed with green/yellow sleeving.

When connecting the new accessory ensure that only the bare end of the wire enters the terminal and no bare wires are visible.

3. Tighten terminal screws securely. (Do not over tighten)

### 4. Complete Installation & Test

1. Carefully position the accessory into the mounting box, ensuring that no wires are trapped between the plate and the wall and secure with screws (do not over tighten) then insert screw covers (optional).

2. Once the installation has been completed correctly, replace the fuse/reset MCB (trip), switch the power back on at the consumer unit and test.

### Switch types

#### One Way Switching

One way switching is used in installations that require just one switch to control a light (or circuit) i.e. on or off.

A two-way switch can be used for one way connection, use COM and L1 terminals. For multiple gang switches [2, 3 & 4 repeat wiring method for each switch].

#### Two Way Switching

Two way switching is used where a light is controlled by two switches.

For multiple gang switches [2, 3 & 4 repeat wiring method for each switch].

### Features

**Overload Protection** – This dimmer is fitted with an overload current and over-temperature protection. In the event of an overload or temperature condition the dimmer will stop working until the overload is corrected, or the dimmer has cooled. Please check the total load ratings before installing.

**Soft Start** – To prolong the life of the connected lighting this dimmer features a soft start function. Upon switching on, lighting will increase from 0 to 100% in 1.2 seconds.

For your safety, this product must be installed in accordance with local Building Regulations. **If in any doubt, or where required by the law, consult a competent person who is registered with an electrical self-certification scheme.** Further information is available online or from your Local Authority.

Please read carefully and use in accordance with these safety wiring instructions. Before commencing any electrical work ensure the supply is switched off at the mains. Either by switching off the consumer unit or by removing the appropriate fuse or turning off MCB (trip). Wiring should be in accordance with the latest edition of the IET regulations (BS 7671).

To prevent fire hazard always use cable of the correct rating & type for the application.

**Warning do not exceed the load rating of this device as stated on the rear of the product.**

#### Wire Identification – Twin & Earth Cable

Note – As from 1st April 2004 new colour codes for hard wire installations were introduced.

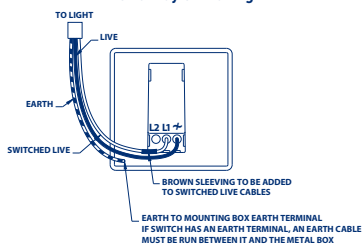
**EARTH** = Green/Yellow Sleeving

**NEUTRAL** = Black (pre Apr 04) / Blue (after Apr 04)

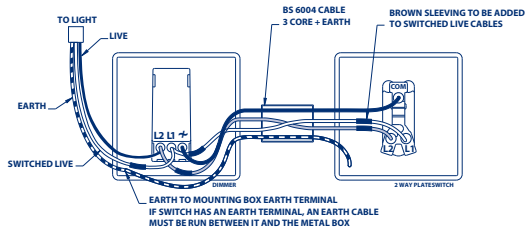
**LIVE** = Red (pre Apr 04) / Brown (after Apr 04)



### One Way Switching



### Two Way Switching



### Installation Notes

Only one dimmer is allowed in a two-way circuit.

If the installation uses a four lug metal mounting box, remove the top and bottom lugs or bend fully back.

For white moulded products, if the dimmer knob blocks the screw fixing holes, remove knobs, fix to wall and then reattach knobs.

## Minimum Dimming Level Setting

This dimmer allows the user to set the minimum level of light at the lowest point of the knob control.

Switch on the power and turn the dimmer knob to the MINIMUM position (anti-clockwise).

Push the knob 8 times continuously.

The connected lighting will increase and decrease in brightness twice to indicate that the dimmer is in 'configuration mode', it will then maintain a low illumination level or turn off.

To adjust the minimum dimming level (factory default min brightness is 10% of the rated power)

Slowly adjust the brightness (clockwise) to the desired light level.

Push the knob for 4 times continuously.

The lighting will increase and decrease the brightness once to confirm the adjustment is complete.

This dimmer has the ability to change from Trailing to Leading edge dimming (Default trailing). As technology has advanced to become more efficient and environmentally friendly, dimming has become more complicated. Trailing edge dimming is generally the suitable mode, especially for LED. If the connected lighting has compatibility issues it will result in flickering or poor dimming performance.

To change the dimming mode type,

- Turn on the dimmer, and adjust to its maximum setting (clockwise).
- Press the knob on/off 10 times, the connected light will flash once to indicate the dimmer is in trailing edge mode, or twice for leading edge.
- Repeat the operation to change the mode

Note - Not all LED lamps are dimmable – check the packaging/product specification.

Voltage : 220-240V ac

Frequency : 50/60Hz

Dimmer Type: Switchable, Leading & Trailing Edge

Rating : See charts

Terminal capacity : 2 x 1mm<sup>2</sup> 2 x 1.5mm<sup>2</sup>

Min box depth (profiled plates) : 1 & 2 gang switches 25mm 3, & 4 gang switches 35mm

Min box depth (flat plates) : 35mm

### ASTA Approved

The ASTA quality mark is evidence that the product has been independently tested to comply with the relevant clauses of the applicable standards.



## Load Information

Lamp Type	Trailing (RC)	Leading (RL)
Incandescent	5-200W	5-100W
Halogen (Eco + Std)	5-200W	5-100W
Dimmable LED	5-150W	5-100W

### Incandescent and ECO Halogen Lamps

Plate size	No. of Dimmers	Max. each Dimmer	Max. total per plate
Square plates 86mm x 86mm	1	200W	200W
	2	200W	400W
Rectangular plates 146mm x 86mm	3	200W	600W
	4	200W	800W

### LED Lamps

Plate size	No. of Dimmers	Load per Dimmer	Max. total per Dimmer	Max. per plate	Max. total per plate
Square plates	1	5-150W	≤10	100W	≤10
86mm x 86mm	2	5-150W	≤10	200W	≤20
Rectangular plates 146mm x 86mm	3	5-150W	≤10	300W	≤30
	4	5-150W	≤10	400W	≤40

## Batch Code Explanation

yyWxx Manufacturing date code, year of manufacture (yy) and week of manufacture (Wxx)

## Address/Helpline

**Luceco PLC**  
Stafford Park 1  
Telford TF3 3BD  
ENGLAND

**(EU) Luceco SE**  
C/ Bobinadora 1-5  
08302 Mataró, Barcelona  
SPAIN

If you have further technical assistance you can get in touch with our

**Technical Helpline on:**

**+44 (0)3300 249 279**

**[technical.support@bgelectrical.co.uk](mailto:technical.support@bgelectrical.co.uk)**

## Additional Advice for Decorative Products

Fixing method varies depending on which product range is supplied. Always ensure wall surface is reasonably flat and smooth, with no bumps or projections. Metal frontplates WITH screw fixing holes, fix the unit to the back box using two fixing screws supplied. All Decorative products MUST have an earth connection between the frontplate and back box. Frontplates WITHOUT screw fixing holes. These products comprise main unit with integral gasket, and frontplate as separate item. Fix unit to back box using two fixing screws supplied. Clip frontplate onto main assembly, ensuring screwdriver notch is located bottom right hand corner.

To remove plate, place medium size flat bladed screwdriver in notch and lever off against gasket.

## Care

To maintain the high quality appearance of decorative finish switches and sockets, BG Electrical recommend the use of a soft cloth periodically to clean the front face. When installing a decorative product please ensure that the wall is decorated, finished and free of moisture prior to installation.

BG Electrical recommends avoiding using, but not restricted to, these substances from becoming in contact with the decorative metal frontplates when cleaning or decorating:

- Adhesive tape, including low tack masking tape
- Solvents
- White spirit
- Multi surface cleaners
- Industrial multipurpose cleaning wipes
- Wet wipes

Using items like those listed above may cause a degrading effect to the frontplates lacquer/plated finish, although the function will remain unaffected.

## Environmental Protection



This symbol is known as the "Crossed-out Wheelie Bin Symbol". When this symbol is marked on a product or battery, it means that it should not be disposed of with your general household waste. Some chemicals contained within electrical/electronic products or batteries can be harmful to health and the environment. Only dispose of electrical/electronic/battery items in separate collection schemes, which cater for the recovery and recycling of materials contained within. Your co-operation is vital to ensure the success of these schemes and for the protection of the environment.