



**E344DB**

## 2 Gang, 1 Way LED Dimmer switch

### Installation Instructions

#### IMPORTANT

Installer and Users please note: Installation of this item should only be attempted by a competent professional.

#### BEFORE USE

You must inspect the item for any signs of damage. If the product is damaged, DO NOT use it, and contact your supplier immediately.

#### PRODUCT SAFETY

- For indoor use only.
- Do not use the item for other than its intended use.
- Observe the maximum rating for the item.
- Before use read these instructions carefully and use in accordance with these safety instructions
- Before commencing and electrical work ensure the supply **is switched of at the mains**. Either by switching off at the consumer unit or by removing the appropriate fuse.
- Wiring should be in accordance with latest edition of the IEE regulations (BS7671).

#### Wire Identification – Twin & Earth Cable

EARTH = Green/Yellow Sleaving

NEUTRAL = Black or Blue

LIVE = Red or Brown



The ends of the individual conductors should have the insulation removed by approx. 12mm. Any bare earth conductors should be sleeved to 12mm from the end. All measurements are for guidance only and may vary according to the relevant installation.

## HOW TO USE

### If replacing an existing 2 gang dimmer switch.

1. If at any point you have any doubts about installing this item then STOP and consult a competent professional.
2. Inspect the item for any damage, if damaged DO NOT USE.
3. This item is designed to be installed into a standard single gang backbox and is rated at a maximum LED load of 150W per switch.
4. Switch off the Mains supply at the Fuse Board
5. Remove the existing switch/dimmer.
6. Notes should be taken of the correct wiring positions and connections as this may differ from the new switch.
7. Prepare the cable ready for use.
8. Connect the input connection, L1 and the output for each of the lights.
9. If the back/pattress box is of metal construction and has an earthing terminal a connection should always be made to the appropriate terminal. All bare earth wire should be sheathed.
10. Fix the dimmer to the backbox using the screws supplied. Do not over tighten. You can optionally use the included screw hole covers to hide the screws
11. Once the work has been completed correctly replace / switch on the fuse for the circuit and switch the power back on then test.

### If fitting a new 2 gang dimmer switch

1. The circuit being worked upon should be isolated from the Mains supply at the Fuse Board
2. If at any point you have any doubts about installing this item, then STOP and consult a competent professional.
3. Inspect the switch for any damage, if damaged DO NOT USE.
4. This item is designed to be installed into a standard single gang backbox and is rated at a maximum LED load of 150W. You MUST check that the supply and output circuits are of sufficient specification for the load. The rating of any cable can depend on the CSA and fixing method. See the table at the end of this manual.
5. Check the back/pattress box is of the appropriate size and is fitted securely and correctly.
6. Connect the input connection, L1 and the output for each of the lights.
7. If the back/pattress box is of metal construction and has an earthing terminal a connection should always be made to the appropriate terminal. All bare earth wire should be sheathed.
8. Fix the dimmer to the backbox using the screws supplied. Do not over tighten. You can optionally use the included screw hole covers to hide the screws
9. Once the work has been completed correctly replace / switch on the fuse for the circuit and switch the power back on then test.

## **GENERAL SAFETY REQUIREMENTS**

Domestic wiring must be tested periodically by a qualified electrician at least once every 10 years or at every change of occupancy. For office and retail premises (and buildings such as village halls) the wiring must be inspected at least once every 5 years. It is recommended that all buildings be fitted with smoke alarms (it is mandatory for new buildings).

## **CHANGES TO BUILDING REGULATIONS – IMPORTANT!**

As from 1 January 2005, any electrical work done in domestic, fixed wiring installations in England and Wales, will have to follow new rules & changes to the Building Regulations Part P. These rules have been introduced to help reduce the number of deaths, injuries and fires caused by faulty installations. The installation work may be carried out by anyone providing it is in accordance with the Regulation standards. Certain electrical work (non-notifiable or minor work) may be carried out without having to use a registered electrician or notify Local Authority Building Control, such as:

- replacing any electrical fitting (for example, socket outlets, light fittings, control switches)
- adding fused spurs, sockets or lights to an existing circuit (but not in a kitchen, bathroom or outdoors)
- any repair or maintenance work

For minor work done by a non-qualified electrician, it is highly recommended it is checked by a qualified electrician to ensure it is safe.

For all other work (notifiable or major work) a Building Regulations application is required & it must be checked to make sure it is safe.

This may be done by either an electrician who is part of a competent person self-certification scheme, or by notifying the Local Authority Building Control Department who will make required arrangements.

An application must be made to the Local Authority before commencing work such as: -

- adding a new circuit
- adding/altering any circuit in a room with water (kitchen, bathroom, etc)
- adding/altering any circuit outdoors (outdoor sockets, lights, etc)

Where work is done by a qualified electrician, they will be responsible for checking the work and the Local Authority does not need notification.

Where a qualified electrician or Local Authority is responsible for checking the work, they will provide a certificate or notice to confirm that the installation is tested & safe to use.

## **IT IS RECOMMENDED TO USE A QUALIFIED ELECTRICIAN**

If there is any doubt whether electrical work needs notification of the Local Authority, they should be contacted first for advice.

## **CABLE INSTALLATION METHODS AND SIZES**

The current carrying capacity of any cable is dependent on the installation and then the voltage loss that may be experienced over the length of the cable run. The installation methods are listed below and the table following shows the current carrying capacity of the differing cables sizes for each method along with the voltage drop that would occur per meter for each cable type.

Method A – Enclosed in conduit in an insulated wall

Method B – Enclosed in conduit or trunking on a wall

Method C – Clipped direct

Method 100 – In contact with plasterboard, ceiling or joists, covered by thermal insulation not exceeding 100mm

Method 101 – In contact with plasterboard, ceiling or joists, covered by thermal insulation exceeding 100mm

Method 102 – In a stud wall with thermal insulation with cable touching the wall

Method 103 – Surrounded by thermal insulation including in a stud wall with thermal insulation with cable not touching the wall

| Conductor (Cable Size Guide) & Max Load |                    |                    |                    |                    |                    |                     |                     |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|
| Installer Method                        | 1.0mm <sup>2</sup> | 1.5mm <sup>2</sup> | 2.5mm <sup>2</sup> | 4.0mm <sup>2</sup> | 6.0mm <sup>2</sup> | 10.0mm <sup>2</sup> | 16.0mm <sup>2</sup> |
| Method A                                | 11.5A              | 14.5A              | 20A                | 26A                | 32A                | 44A                 | 57A                 |
| Method B                                | 13A                | 16.5A              | 23A                | 30A                | 38A                | 52A                 | 69A                 |
| Method C                                | 16A                | 20A                | 27A                | 37A                | 47A                | 64A                 | 85A                 |
| Method 100                              | 13A                | 16A                | 21A                | 27A                | 34A                | 45A                 | 57A                 |
| Method 101                              | 10.5A              | 13A                | 17A                | 22A                | 27A                | 36A                 | 46A                 |
| Method 102                              | 13A                | 16A                | 21A                | 27A                | 35A                | 47A                 | 63A                 |
| Method 103                              | 8A                 | 10A                | 13.5A              | 17.5A              | 23.5A              | 32A                 | 42.5A               |
| Voltage Drop<br>(mV/A/m)                | 44                 | 29                 | 18                 | 11                 | 7.3                | 4.4                 | 2.8                 |

### SERVICE WARRANTY

- Eagle guarantees the product free from defects in materials and workmanship for a period of twelve months.
- Should this switch be operated under conditions other than those recommended, at voltages other than the voltage indicated on the switch, or any attempts made to service or modify the switch, then the warranty will be rendered void.
- The product you buy may sometimes differ slightly from illustrations. This warranty is in addition to, and does not affect, your statutory rights.
- Our guarantee is administered by our retailers.
- If your product arrives damaged, you must contact the retailer from whom you bought it. The retailer's contact details will be on the invoice that arrived with the product, or on the e-mail you received when you placed the order. Do not contact Eagle, only your retailer can arrange a replacement.
- If the product needs to be repaired or replaced, you must contact the retailer from whom you bought it.
- If you have just received your product and require technical help using it, please call our Help Desk on (0845) 459 4816
- If you have any other technical queries about the product, please call our Help Desk on (0845) 459 4816

Electrovision Ltd.  
Lancots Lane, Sutton  
St. Helens, Merseyside  
WA9 3EX  
[www.electrovision.co.uk](http://www.electrovision.co.uk)