



AU-DS251 1 Gang 2 Way 40-250VA  
 AU-DS252 2 Gang 2 Way 40-250VA  
 AU-DS253 3 Gang 2 Way 40-250VA  
 AU-DS254 4 Gang 2 Way 40-250VA  
 AU-DS401 1 Gang 2 Way 60-400VA  
 AU-DS402 2 Gang 2 Way 60-400VA

\*Suitable for control of dimmable electronic transformers and tungsten lamps WITHOUT DE-RATING

INTERNATIONAL LIGHTING CORPORATION  
**AURORA**

**NO DE-RATING REQUIRED\***



**AURORA**  
 INTERNATIONAL LIGHTING CORPORATION

## DIMMER SWITCH

ROTARY CONTROL - PUSH ON / PUSH OFF  
 NO DE-RATING REQUIRED\*

250W/VA

400W/VA

### AURORA ROTARY CONTROL DIMMER SWITCHES - INSTALLATION INSTRUCTIONS

Aurora dimmer switches comply with the latest European Safety and EMC Regulations  
 Safety Compliance - EN 60669-2-1:2000  
 EMC Compliance - EN 50015

READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

PLEASE LEAVE A COPY WITH THE USER/MAINTENANCE ENGINEER FOR FUTURE REFERENCE

#### PRODUCT FEATURES

- Push on, push off, rotary dimming control switch.
- Suitable for use with Resistive & Inductive loads.
- Suitable for control of dimmable electronic transformers, toroidal (wire wound) transformers and tungsten halogen lamps WITHOUT de-rating.
- Integrated over-temperature protection fuse.
- Short-circuit protection.
- Module case ultrasonically sealed to reduce dimmer buzzing
- Smooth dimming operation from 0 - 100%
- One or two way switching
- One, two, three & four gang versions available

#### APPLICATIONS

Aurora dimmer switches are suitable for the following applications:

Mains Voltage GLS bulbs - maximum load according to the dimmer label - add the bulb wattages together.

Mains Voltage halogen bulbs - maximum load according to the dimmer - add the bulb wattages together. De-rating NOT required.

Electronic & Wire Wound low Voltage lighting transformers - maximum load according to the dimmer label - add the VA ratings of the transformers together. De-rating NOT required.

Fans - maximum load according to the dimmer - add the wattages of the fans together.

De-rating NOT required.

DO NOT use this dimmer switch for fluorescent or energy saving lamps. These types of loads will eventually damage this dimmer switch beyond repair. Incorrect use will invalidate the guarantee.

#### FAULT FINDING

Each dimmer module has a minimum and maximum load rating - see the label on the module.

Dimmers must not be under-loaded or overloaded. Under-loading may cause the lamp(s) to flash.

Overloading will cause the dimmer overload protection to operate and the lights to be switched off.

Removal of the overload will allow the overload protection to reset.

When this dimmer is used to control low voltage lighting transformers, choose a transformer with a maximum VA rating close to the rating of the lamp it supplies. For example use a 60VA transformer for a 50W low voltage lamp. Do not overload the transformers.

If a dimmer overload occurs when controlling transformers a correctly calculated number of transformers, it is likely that the transformers are presenting a bigger load than their rated value. In this case, remove one or some transformers from the circuit or use a higher rated dimmer.

#### INSTALLATION

READ THESE INSTRUCTIONS CAREFULLY. IF IN ANY DOUBT, CONSULT A QUALIFIED ELECTRICIAN

1. Switch off the power at the mains. Remove the existing switch taking note of the wiring of the switch and the terminal markings. If there are two or more wires in one terminal on the old switch they must be put in the same terminal in the dimmer switch.
2. Clear the wall mounting box of plaster debris etc and ensure that there are no projecting screws. Dimmers on 1 gang plates fit wall boxes with 60.3mm screw fixing centres. Dimmers on 2 gang plates fit wall boxes with 120.6mm fixing centres. Most models can fit into a 16mm plaster depth box or a standard surface mounted pattress. Recessed mounting boxes with 4 fixing lugs must have the top and bottom lugs bent flat or broken off to allow the dimmer switch to fit.
3. To connect the dimmer switch for 1 or 2-way switching, please refer to the diagrams overleaf.
4. When stripping the cables for wiring ensure that no bare conductors can project from the terminals.
5. Dimmer switches with a metal front plate **MUST** be earthed using the Earth terminal or Earth fly lead on the front plate.
6. After connecting the wiring push the dimmer switch back towards the wall box ensuring the that the wiring is not trapped between the back of the dimmer module and the mounting box or the front plate and the mounting box, tighten the plate fixing screws provided. Do not over-tighten the fixing screws or you may distort or break the front plate.
7. When installation is complete switch on the mains supply and push the dimmer knob to operate. Adjust the rotary knob until the desired light level is reached.  
 Please note - DO NOT perform insulation resistance tests on a lighting circuit with a dimmer switch connected. An insulation resistance test may damage the electronic components in the dimmer beyond repair.

A slight buzzing noise may be heard from the dimmer switch in operation, this is perfectly normal.

## WIRING CIRCUITS

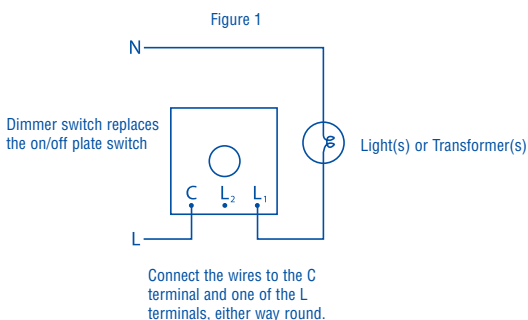
Aurora rotary dimmer switches are suitable for 1 or 2-way lighting circuits. The dimmer has a push-on, push-off switch action and a rotary action to dim the light. Each dimmer module has 3 screw terminals, L1, L2 & C (common).

### 1-Way Switching

In 1-way lighting circuits each light is controlled by 1 switch. Your Aurora dimmer switch should replace this switch.

Remove the existing switch taking note of the wiring of the switch and the terminal markings. Connect the two wires either way round, to the C terminal and either L1 or L2. One of the L terminals is not used for 1-way switching. See Figure 1.

1-way switching wiring diagram



### 2-Way Switching

2-Way lighting circuits have two switches controlling the same lights from two different locations. This arrangement is commonly used at the top and bottom of staircases or at the entry and exit doors to a room.

Only **one** standard plate switch may be replaced with a dimmer switch for 2-way switching applications or the lights will flicker on and off. There are commonly two ways to wire 2-way switching. See figures 2 & 3 for typical 2-way circuits.

Remove one of the existing switches taking note of the wiring of the switch and the terminal markings.

The wires connected to the COMMON terminal of the plate switch should be connected to the C terminal of the dimmer switch. The wires connected to the other two terminals of the plate switch should be connected either way round to terminals L1 & L2 of the dimmer switch.

2-way switching wiring diagrams

Figure 2

2-Way dimmer connection

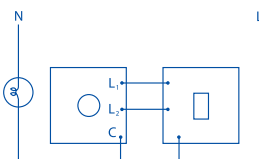
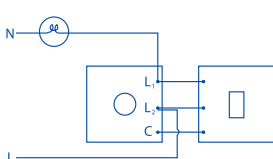


Figure 3

Alternative 2-Way dimmer connection



The dimmer switch must only replace **one** of the 2-way plate switches

### Environmental Protection (W.E.E.E.) – Aurora's WEEE Reg.No. WEE/BG0130YX



Waste Electrical & Electronic Equipment Regulations (WEEE) requires that any of our products showing this marking (left) must not be disposed of with other household or commercial waste. Aurora does not levy any WEEE disposal charges to its customers for affected WEEE related products. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate any such product from other waste types and recycle it responsibly at your local facilities. Check with your Local Authority, Recycling Centre or retailer for recycling advice. If, when you purchased any Aurora product, your supplier included a WEEE disposal fee, you should then contact your supplier for advice on his takeback of the product for the correct disposal.

### GUARANTEE

This product is guaranteed for a period of 1 year from the date of purchase. The guarantee is invalid in the case of improper use or installation, tampering, removal of the Q.C. date label, installation in an improper working environment or installation not in accordance with the current edition of the I.E.E. Wiring Regulations (BS 7671).

This product must not have been used with fluorescent or energy saving lamps or overloaded beyond its rating. It must only have been used on a 200-240-Volt supply.

Should this product fail during the guarantee period it will be replaced free of charge, subject to correct installation and return of the faulty unit. Aurora does not accept responsibility for any installation costs associated with replacement of this product. Your statutory rights are not affected. Aurora reserve the right to alter specifications without prior notice.