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ZANO ZGRIDLED SPECIALIZED LED DIMMER

The ZGRIDLED dimmer has been specifically designed to dim LED loads by using a proprietry control system which in real time analyses the LED's current waveform and calculates the optimum dimming range. This advanced software was developed by us at Zano Controls to consistently & effectively control lamp born flicker. The ZGRIDLED will also effectively dim CFL lamps.

Historically triac dimmers and lamp compatibility have caused major difficulties with dimming LED loads but our new dimming technology has eradicated this issue, by continuously monitoring and responding to fluctuations in power drawn through the dimmer, and not only is the ZGRIDLED an awesome LED dimmer, it is silent during operation & reduces noise from lamps and drivers. Say goodbye to buzzing and hello to quiet, reliable dimming!

MINIMUM LEVEL PRE-SET FOR DIMMING CFL'S AND DIMMABLE LED LAMPS

The minimum level pre-set is located in the software of the ZGRIDLED. This is used to set the minimum level of light to a stable level when dimming CFL or LED dimmable lamps to minimise flicker. To adjust the MLP the dimmer must be powered and switched on.

- 1. Rotate the knob clockwise to its full on position.
- 2. Turn the dimmer off by pushing the knob.
- 3. Turn the knob anti clockwise to its full off position.
- 4. Turn on again with another push of the knob.
- 5. The lights will flash to indicate you are in programming mode.
- 6. You will then have 20 seconds to select your minimum level.
- 7. Once the 20 seconds are up, the lights will flash again, indicating that the minimum level is set and stored!

MAXIMUM PLATE LOAD RECOMMENDATIONS

Cover plate size (WxH)	CFL	LED
Single Gang 76mm x 76mm	250W	250W
Double Gang 137mm x 76mm	160W	160W
6-8 Gang 137mm x 137mm	160W	160W
9-12 Gang 137mm x 197mm	160W	160W
18 Gang 197mm x 197mm	160W	160W
24 Gang 197mm x 257mm	160W	160W

SPECIFICATIONS

SPEC	SINGLE GRID
PROD REF.	ZGRIDLED
LAMP TYPE	LED / CFL
MAX WATT	250
MIN WATT	5
FLUSH WALL BOX	72 x 72 x 35 mm

FEATURES:

Single gang grid dimmer switch designed specifically to work with LED's & compatible with all LED lamps.

Will dim a mix of manufacturers LED's on one circuit. (We are yet to find a dimmable LED that will not dim flicker free.)

Proprietry control system which analyses the LED's current waveform and calculates the optimum dimming range.

Minimum load 5 watts.

Maximum load 250 watts.

Silent in operation & aids lamp & driver noise reduction.

Soft start.

The dimmer controls the duty cycle synced to the zero crossing.

Two way switch operation.

2 year guarantee.

Patent number 1304237.9.

Active minimum level pre set to allow for power supplies to energise lamp at low levels.

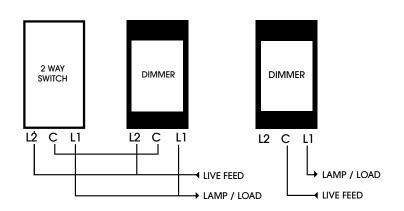
Real time over current analysis and automatic shut down which also protects the dimmer itself, switching off before any damage can occur, extending the life expectancy of the product.

Real time thermal analysis and automatic shut down which also protects the dimmer itself, switching off before any damage can occur, extending the life expectancy of the product.

Works with leading & trailing edge lamps & drivers.

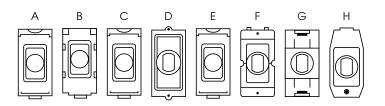
The ZGRIDLED dimmer is the ultimate dimmer for compatibility, and we have found it is suited to every LED lamp we have tested, so if you have a new lamp fo us to test, or you would like to find out about your lamp's compatibility give us a call 0845 519 5858 or check out our website at zanocontrols.com for more information.

WIRING INSTRUCTIONS



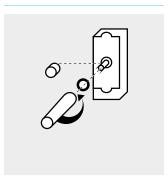
WE RECOMMEND THAT THE INSTALLATION OF THESE PRODUCTS SHOULD ONLY BE CARRIED OUT BY A QUALIFIED ELECTRICIAN.

- TURN OFF MAINS at distribution board.
- This product must be installed with the terminals at the bottom.
- Wire device using suitably rated cable as in wiring diagrams.
- Screws should be tightened to a max of.33Nm.
- Check polarity is correct throughout.
- Fit appropriate adaptor as in assembly diagrams.
- Fit device into wall box ensuring cables are not obstructed.
- Secure front plate.

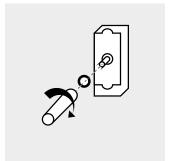


- a DFTA e. MK Logic
- b. Scneider Electric (GET) c. BG f. Hamilton
- d. Wandsworth h. Crabtree

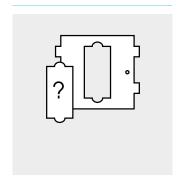
1. Remove knob, unscrew ring and slide off adaptor.



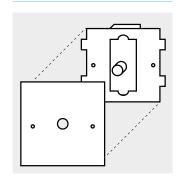
3. Use tool to secure correct adaptor with ring.



2. Choose appropriate adaptor to fit your grid.



4. Clip in to grid. Replace knob.



DIMMING INFORMATION

LED lamps

There are several issues with dimming LED lamps. At Zano we have tested a number of different manufacturer's lamps and fittings and would recommend you contact us if you have a large project where your requirements can be discussed, we're always happy to help!

LEDs will generally dim down to lower levels than CFL lamps, on average they will dim down between 5 to 15% but they are still susceptible to 'drop out' which means they may switch off at low levels so care should be taken when setting the Minimum Level Preset. LED lamps are also susceptible to mains voltage fluctuations and may switch off or flicker where these occur.

If using 2-way switching and the dimmer is set to a low level the lights may not switch on even I they have previously operated at that level due to the power level needed to start the lamps. When using the dimmer alone the software in the dimmer will balance this requrement automatically, raising levels until the lamp is lit, then lowering them again immediately to restore the former dimmed level but this function is disabled when adding two way switches to the circuit.

To date all LEDs we have tested are dimmable with our ZGRIDLED. If you are planning a job and would like to check that your lamps are compatible please contact us and we will be happy to test your brand for you in advance. We would not recommend mixing different makes of lamps as you may find varying results, also results with different batches of manufacturers from the same supplier may vary. For more information or advice please view our website www.zanocontrols.co.uk or contact our Team on 0845 519 5858.

Compact fluorescent lamps (CFL)

There are several issues with dimming compact fluorescent lamp. The lamps need to be burnt in with most manufacturers recommending running the lamps at full brightness for a period so please check with the manufacturer for specific product guidance.

Compact fluorescent lamps use a ballast in the base. If these are not designed to be dimmed then they can get hot enough to be considered a fire hazard. Care should be taken to ensure the lamps you have selected are actually dimmable.

All CFL lamps require a 2 minute run-in time at full brightness before dimming but this is temperature related so atmospheric conditions will have a dramatic effect. CFL lamps will not dim down to very low levels. At low levels they will start to flicker and then may switch off due to the gases becoming cold. Expect to achieve 30 to 50% dimming capability but temperature will affect results.

Guarantee

- 1. The Company guarantees at its entire discretion either to replace or repair any of the Goods which within the Guarantee period of the Goods are shown to its satisfaction to be defective through faulty material or workmanship alone, provided that no attempt has been made by the Customer or a third party to rectify, dismantle or alter the Goods in any way.
- 2. The Guarantee period for any Goods is as specified at the time in the Company's catalogue current at the time of acceptance of the Customer order and commences on the delivery of the Goods.
- 3. All terms, conditions, warranties, or representations, whether expressed or implied, as to description, condition, quality or fitness for purpose of any of the Goods are hereby excluded.
- 4. So far as permitted by statue, the Company shall not be liable for loss or damage whether direct or consequential and whether suffered by or occasioned to the Customer, it's employees or agents or to any third party.





