

## LOW VOLTAGE CONSTANT VOLTAGE (CV) LED DRIVER & 3W Marker Light

**PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION  
LEAVE A COPY FOR THE USER / MAINTENANCE ENGINEER FOR FUTURE REFERENCE**

### IMPORTANT INSTALLATION INFORMATION

Installation should be carried out in accordance with the latest edition of the NEC Wiring Regulations.  
For use with Illuminous **constant voltage** LED products.

### IMPORTANT.

- Constant VOLTAGE LEDs **MUST** be wired in **PARALLEL** ensuring **correct polarity**. Failure to do so can cause permanent luminaire and/or driver failure.
- **PLEASE NOTE: DC Output – correct polarity must be observed in order for the Constant Voltage LED to operate**

### INSTALLATION NOTES

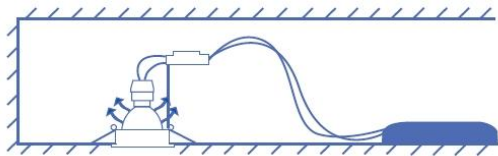
- Ensure that the Driver is not covered with insulation material and has an air gap of 50mm around the driver
- Keep the LED Driver away from direct sources of heat such as lamps, do not install LED driver above the luminaire
- Ensure that ALL electrical connections are tight with no loose strands.
- Suitable for direct mounting on or in cabinets or furniture

### IMPORTANT INSTALLATION INFORMATION

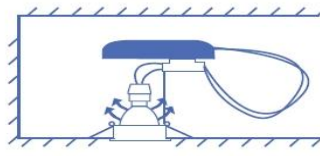
Use the table below to assist with calculating how many LED fittings may be used with the constant voltage LED Driver.

- 1) Always leave headroom in the driver to accommodate thermal changes and variation in LED.
- 2) Try and load >50% of the driver for best dimming results, and less than 90% to give driver headroom.
- 3) Note Derating of the driver according the Ambient temperature and maximum load

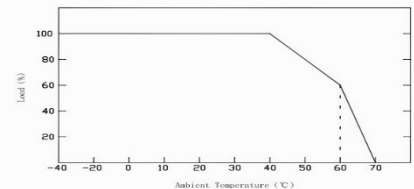
LED Driver, Cat.No.	Watts	Dimmable	Minimum 3W Lamps (For ~50% Load)	Maximum 3W Lamps (Always leave headroom)
EV-12V-30D	30	Yes	5 (5x3=15W)	9 (9x3=27W)
EV-12V-60D	60	Yes	10 (10x3=30W)	19 (19x3=57W)
EV-12V-80D	80	Yes	13 (13x3=39W)	26 (26x3=78W)
EV-12V-120D	120	Yes	20 (20x3=60W)	39 (39x3=117W)
EV-12V-200D	200	Yes	33 (33x3=99W)	66 (66x3=198W)
EV-12V-300D	300	Yes	50 (50x3=150W)	99 (99x3=297W)



Correct Installation



Incorrect Installation



Derating

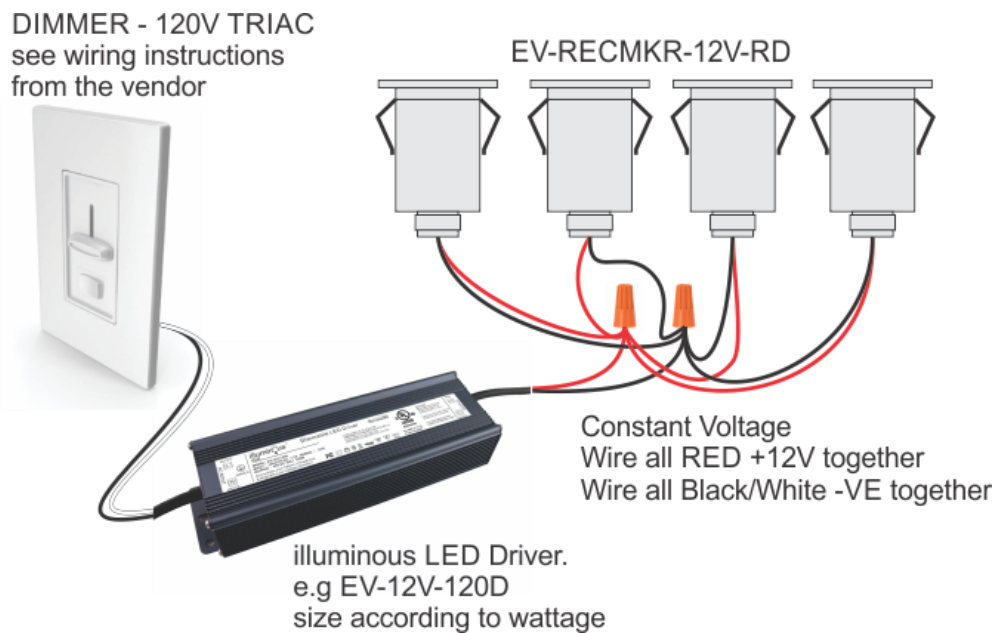
### Environmental Protection (W.E.E.E.) – Illuminous’s WEEE

Waste Electrical & Electronic Equipment Regulations (WEEE) requires that any of our products showing WEEE must not be disposed of with other household or commercial waste. Illuminous 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 Illuminous 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 in the USA for a period of 2 years from the date of purchase, unless otherwise stated in current company literature. The guarantee is invalid in the case of improper use, installation, tampering, removal of the Q.C. date label, installation in an improper working environment or installation not according to the current edition of the National Electrical Code --- Work must be completed by a qualified electrician. 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. Illuminous LLC. or any subsidiary company of Illuminous LLC. does not accept responsibility for any installation costs associated with the replacement of this product. Your statutory rights are not affected. Illuminous reserves the right to alter specifications without prior notice.

- 1) Isolate from the mains supply before installation or maintenance.
- 2) Wire the LED onto the DC output of the driver, IN PARALLEL:
  - Wire **Red** (+12V) from the driver to the **Black** of each lamp, all together.
  - Wire **Black** (-Ve) from the driver to the **White** of each lamp, all together.
- 3) Wire the input to AC 120 Line / Mains. Note colors:
  - **White** – Neutral of AC – wire to **White** of the Driver
  - **Black** – Live or 'Hot' – wire to **Black** of the Driver
- 4) A standard 'TRIAC / Phase' Dimmer may be used on the AC / Line side. Wire as per direction from the manufacture of the Dimmer.



**CONCRETE INSTALLATION**, you can install 1.5" PVC Pipe in the concrete, then insert the lamps into the Pipe

