Analog dimming in luminaires

Installation & Maintenance Information

EATON CROUSE-HINDS SERIES

IF 2010

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

INTRODUCTION

Many Eaton Crouse-Hinds series lighting products have LED drivers compatible with 0-10 volt low-voltage lighting control providing wired (Analog) dimming control.

WIRING REQUIREMENTS

The low voltage wiring should be with 22 AWG (0.33 mm2) wire. Shielded cable or conduit is required for long low voltage wiring runs, or where excessive electrical noise exists. A load of 10% of output current till the output load current set can be connected to the dimming wires (Dim+, Dim-). Installation in accordance with all local and national electrical codes.

NOTICE: PLEASE READ SELECTED DIMMER INSTRUCTION MANUAL CAREFULLY BEFORE WIRING THE DIMMER WITH LIGHTING FIXTURE.

DIMMER OPERATION WITH LED DRIVER INTERFACE

Fig. 1 shows the generic image of the 0-10V dimmers available on the market. Connect the control as shown in Fig.2. Changing the slider position will alter light intensity. Toggling the switch will switch between the preset slide value and the minimum light intensity of the driver. Note that on some drivers this minimum light intensity will not be OFF.

There are multiple configurations with which dimmer can be used yet it must be connected at the output side of driver with Dim+ & Dim- dimming cables. Below image shows the connection of dimmer with driver dimming cables. Refer to IF Sheets (1956, 1978, 1987) for detailed wiring diagram for dimming cables connection.

For list of compatible dimmers visit Compatibility Lists - Inventronics

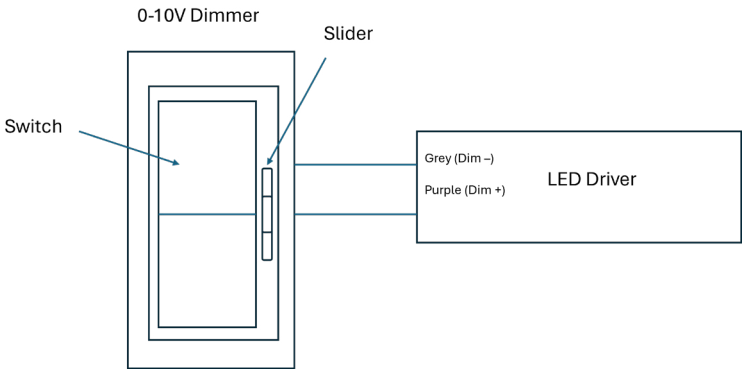


Figure 1

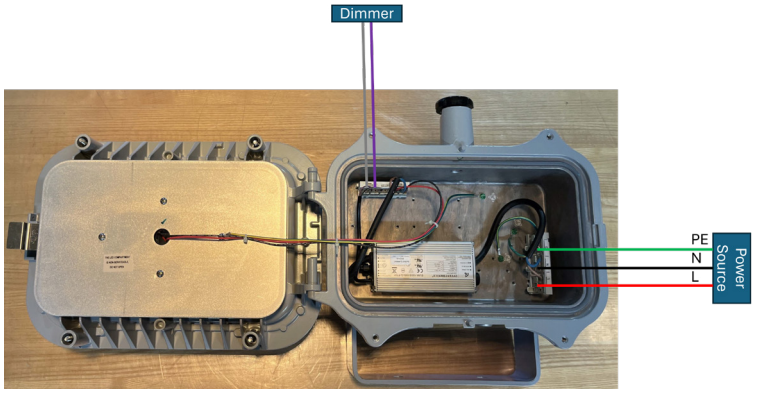


Figure 2

Troubleshooting Guide		
Sr. No.	**Issue**	**Resolution**
1	Lights do not operate at full brightness	A. Check if Dim+, Dim- wires are shorted B. Push slider up. Turn high-end trimpot counterclockwise with a screwdriver
2	Lights do not dim low enough	A. Check if Dim+, Dim- wires are shorted B. Push slider down. Turn the low-end trimpot thumbwheel counterclockwise
3	Lights turn off or flicker at low end	Push slider down. Turn the low-end trimpot thumb wheel clockwise until the lights remain on without flickering.

MAINTENANCE GENERAL

1. Perform visual, electrical and mechanical inspections on a regular basis. The environment and frequency of use should determine this. However, it is recommended that checks be made at least once a year. We recommend an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA No. 70B: Recommended Practice For Electrical Equipment Maintenance (www. nfpa.org).
2. Visually check for undue heating evidenced by discoloration of wires or other components, damaged parts or leakage evidenced by water or corrosion in the interior. Replace all worn, damaged or malfunctioning components, and clean gasket seals before putting the luminaire back into service.
3. Electrically check to make sure that all connections are clean and tight. Mechanically check that all parts are properly assembled.

Contact your sales representative or Eaton Crouse Hinds customer service for additional assistance: (866) 764-5454 or CrouseCustomerCTR@Eaton.com

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