



## ***LED V2 Compartment Lighting*** **INSTALLATION INSTRUCTIONS**

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FM-7.5-231  
REV C  
12/17/08

Congratulations on your purchase of the R•O•M LED V2 compartment lighting system! The integrated track light or light bar can be installed with the R•O•M Shutter or as a stand-alone application. The light bar contains LEDs that emit a brighter, whiter light than halogen lamps at lower voltage. This product feature will provide maximum illumination for many years with proper care and maintenance. **Please read and follow these instructions carefully!**

You will need the following tools to install your lighting system, please note these are not included with your system:

- Drill
- Drill bits - #29
- Countersink bit
- Fasteners for light bar (#8 flat head [countersunk] sheet metal screws are recommended)
- Screwdriver – Phillips
- Wire cutters

To install the light bar complete the following steps:

- 1) Determine the compartment location you would like the light bar(s) installed.

*Note: One LED V2 Driver Board will power up to seven LED V2 Standard Boards. A jumper cable or second driver board may be used to feed light systems equipped with two integrated tracks or light bar assemblies. Consider the orientation of LED board connectors prior to assembly.*

- 2) Determine the path that the wires will be routed (top or bottom exit). The wiring can be attached at either end. Make sure that there are no sharp edges that could cut through the wire insulation.
- 3) Insert the LED Driver board wires from the inside of the end cap through the wire hole, see Figure 1. All wire connectors should remain inside the light assembly when the end caps are installed.
- 4) Remove the light bar lens by sliding it off the extrusion or starting at one end working it out of the extrusion.



Figure 1

- 5) The extrusion end cap should contact the bottom edge of pennant plate if the light bar is positioned adjacent to existing track.
- 6) Match drill mounting holes using a #29 drill bit. Countersink holes for the flat head screws.  
*NOTE: Flat Head Screws recessed in countersunk holes required for preventing LED circuit board shorting out!*

- 7a) LED boards may be repositioned or added where additional illumination is desired. Disconnect feed wire(s) from the LED circuit board being moved. Loosen the #6 screw w/ washer, located near the center of the LED circuit board, until the LED board is free of retaining clip Fig 2.
- b) Unsnap the retaining clip from aluminum extrusion by pushing inwards until it pops loose. Reposition the retaining clip in the desired location of the extrusion. Reinstall retaining clip by wedging the "V"-section into extrusion feature Fig 3.
- c) Attach LED board to associated retaining clip using a #6 Screw. Tighten snugly, being careful not to allow the screw driver to slip off the screw and damage the PCB.
- d) Reconnect LED Boards together.

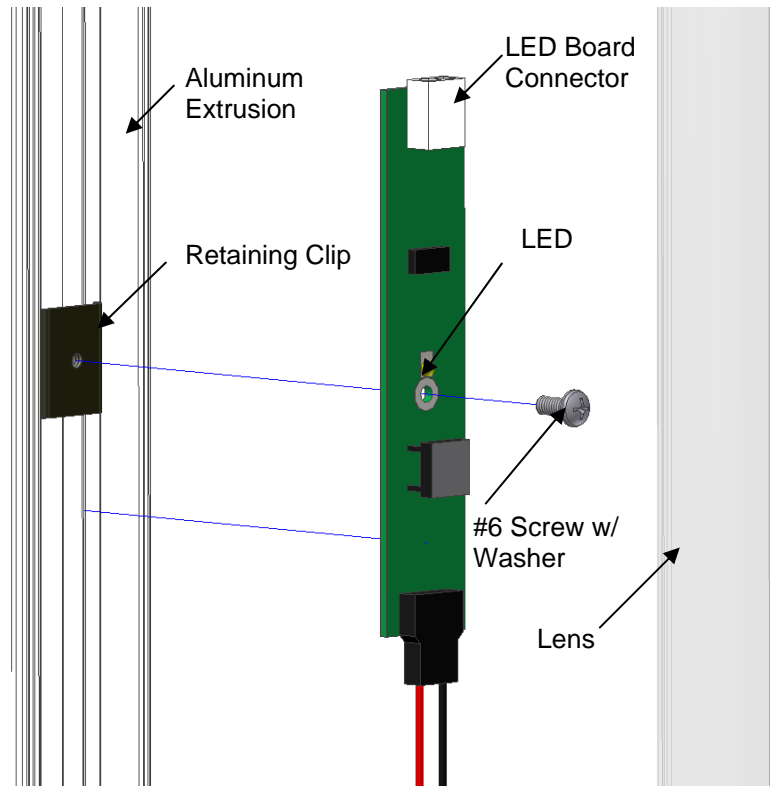


Figure 2

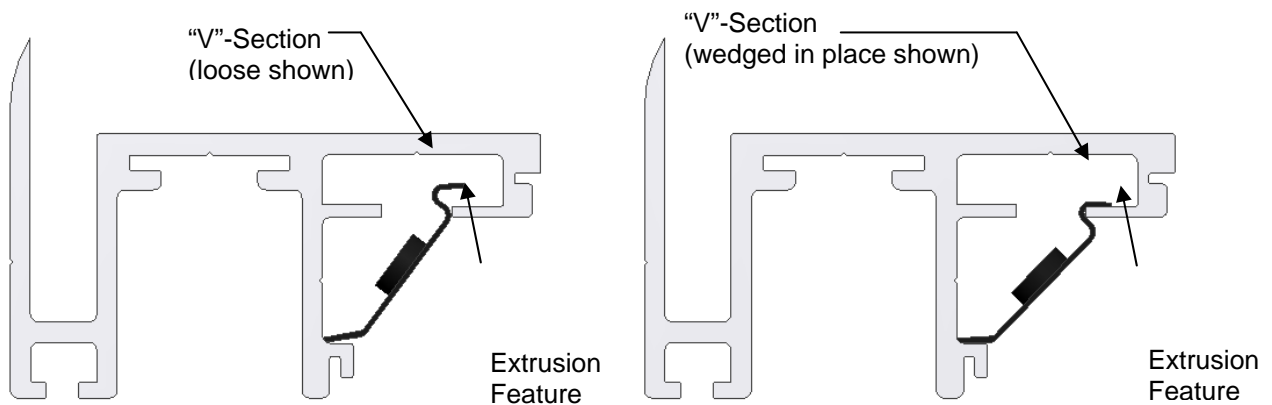
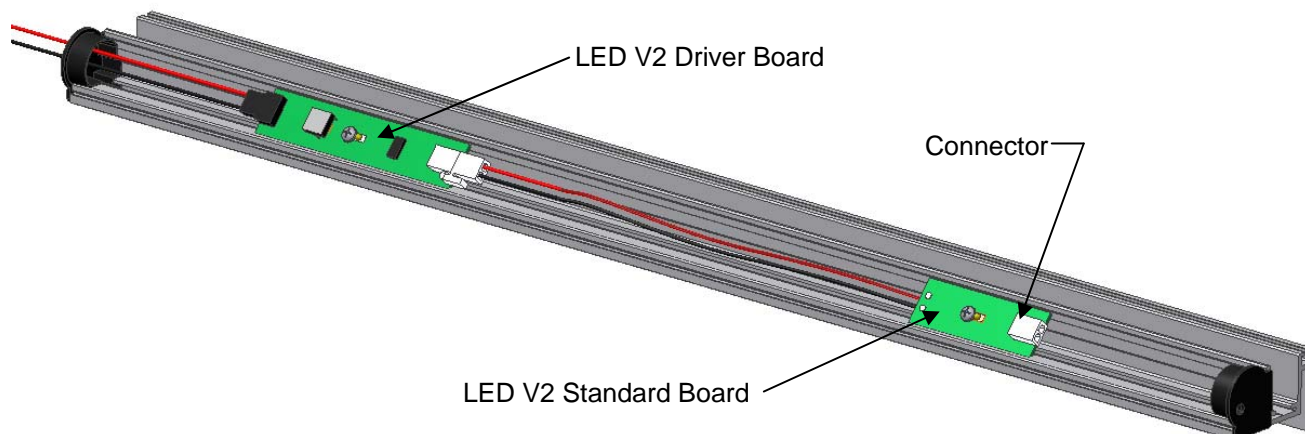


Figure 3 (Integrated Light Track shown)

- 8) Install the light bar or integrated track using #8 flat head sheet metal screws.



*Figure 4 – Assembled Integrated Track  
(lens not shown for clarity)*

- 9) Two Integrated Tracks or Stand-Alone Light Bar Assemblies:

One LED V2 Driver Board can power up to seven LED V2 Standard Boards. Depending on your configuration, a jumper cable or optional second Driver board will be required with applications having two integrated tracks or stand-alone light bar assemblies.

**Jumper Cable:** This configuration has one LED V2 Driver Board. The LED board connector(s) must be orientated in opposite direction on the second extrusion as the primary feed extrusion. The jumper cable enables all LED boards to be daisy chained together.

**Second LED Driver Board (optional):** Both integrated tracks or light bar extrusions are assembled and wired the same with this configuration.

- 10) Using the pigtail wiring provided, connect the red wire to power and the black wire to ground using the connector of your choice. See page 4 for wiring diagram when lights are used with the door ajar switch.

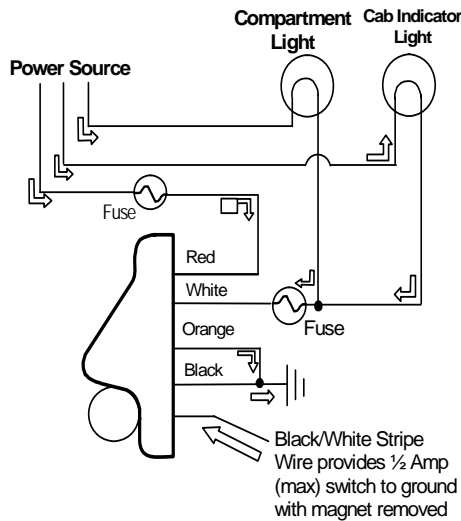
**NOTICE:** Power should be wired directly to LED driver boards ONLY. Wiring to standard LED boards will damage them and will void the warranty.

- 11) Install the plastic lens and end caps.

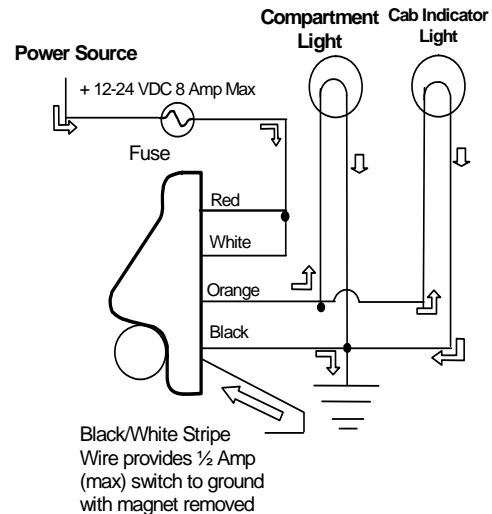
This completes your compartment lighting installation. If you have any questions, please contact R·O·M Corporation at 1-800-827-3692.

## Door Ajar Wiring Diagram and Wiring Test Procedure:

Lights to Ground Thru Solid State  
Switch Configuration  
Indicator Lights to +12-24 VDC 8 Amps Max  
(Supply voltage of less than 11V can  
cause switch to malfunction)



**(Preferred Wiring)**  
Lights to Power Thru Solid State  
Switch Configuration  
Indicator Lights to Ground  
(Supply voltage of less than 9V can  
cause switch to malfunction)



**This device has a solid-state output switch, and polarity is important. Damage to the device may result from extended operation with improper connection of the wires.**

To determine if proper installation has been achieved, check the operation of the door ajar switch by applying a magnet (R.O.M Part # R00011 or any strong magnet) to the door ajar switch where the lift bar rests when the door is closed. When the door is open the compartment light should be illuminated. Therefore, when the magnet makes contact with the door ajar switch the light should turn off. If the compartment light remains on when the magnet makes contact with the door ajar switch, reverse the white and orange wire connections, and repeat the above procedure. If proper operation is still not achieved, re-check the wiring connections for proper wiring.

### Optional Output

The new switch design has a single output that can be split to provide power to both compartment lights and a door ajar indicator light in the cab of the vehicle. If you have multiple indicator lights in the cab that show which door is open, the new design will work with no additional components or modifications. This can be performed using the black wire with white strip wired directly to the light; unless the current draw is more than a 1/2 amp then it will be necessary to use this wire to provide a controlled ground for an optional relay or electronic control provided by user.