Pretoria — Tech Talk # 8

Date: 1/15/11

Topic: Adjustable Fixed Dimming for Standard Configuration LED Drivers

Pretoria Transit Interiors has issued this Tech Talk to keep our customers informed on our products.

Pretoria Transit Interiors has introduced a LED Power Driver that allows for each LED fixture to have 5 available dim levels. The choice of reduced fixture dim levels is intended to aid in the reduction of night time driving windshield glare. The LED Driver has an on-board switch that allows the end user to select the percentage of light output when the bus doors close and the fixture goes into Dim Mode.

LED Driver Features:

- Fixed dimming with 5 available light output settings (10%, 20%, 40%, 60% and 80%) via board mounted selector switch.
- Extinguish mode via power input connector (opening power circuit).
- LED Driver input voltage 18V—32Vdc.
- Operating Temperature: –40C - 55C.
- Output current adjustment via on board potentiometer.
- Low voltage cut off:16—18Vdc.
- Red LED power "on" indicator.
- Input reverse polarity protection.
- Over temperature protection.
- Transients and over voltage.

The LED driver will go into Dim Mode when 24V is applied to the dim pin from the bus PLC. The LED driver has the ability to be set on permanent Dim Mode (10%, 20%, 40%, 60%, 80%) by introducing 24V to both the input power pin and the dim pin simultaneously. When this is done the fixture will no longer have two concurrent output levels but retains the ability to fully extinguish by opening the power circuit from the bus PLC as normal.

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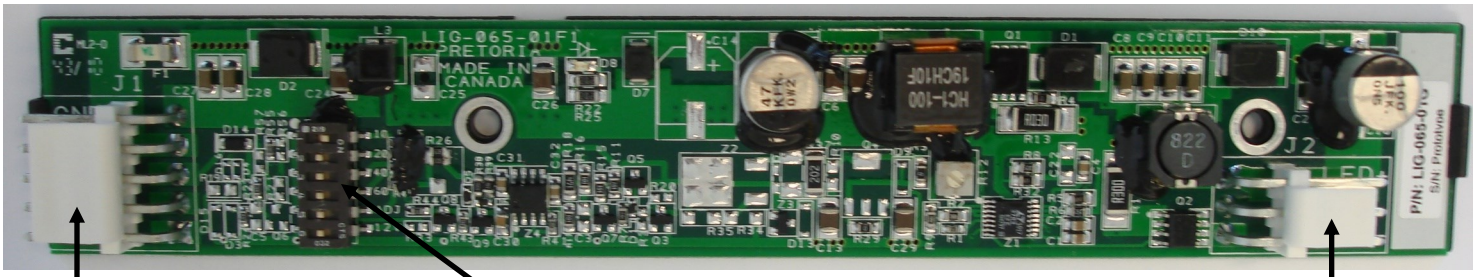
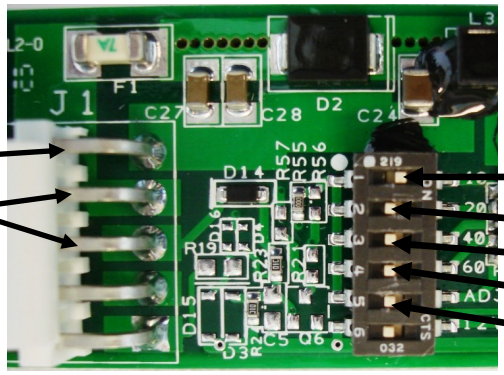
LED Driver: DRV-065-01



Input connector from bus to LED driver

Onboard light output switch

Output connector to LED array



Ground - Input

24V - Input (Normal)

Switch 1 = 10% Output
Switch 2 = 20% Output
Switch 3 = 40% Output
Switch 4 = 60% Output
Switch 5 = 80% Output

The LED driver will go into Dim Mode when it receives a 18V—32V into the Dim Mode Pin from the bus PLC.

Dim off < 7V dc

LED Driver—Onboard Switch / Dim Mode Light Output

	Off	On
1		■
2	■	
3	■	
4	■	
5	■	
6		■

10%

	Off	On
1	■	
2		■
3	■	
4	■	
5	■	
6		■

20%

	Off	On
1	■	
2	■	
3		■
4	■	
5	■	
6		■

40%

	Off	On
1	■	
2	■	
3	■	
4		■
5	■	
6		■

60%

	Off	On
1	■	
2	■	
3	■	
4	■	
5		■
6		■

80%

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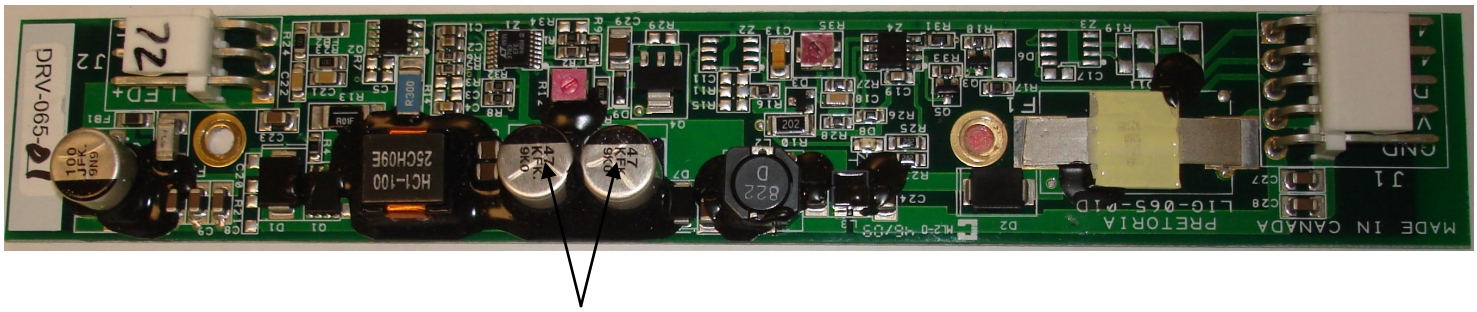
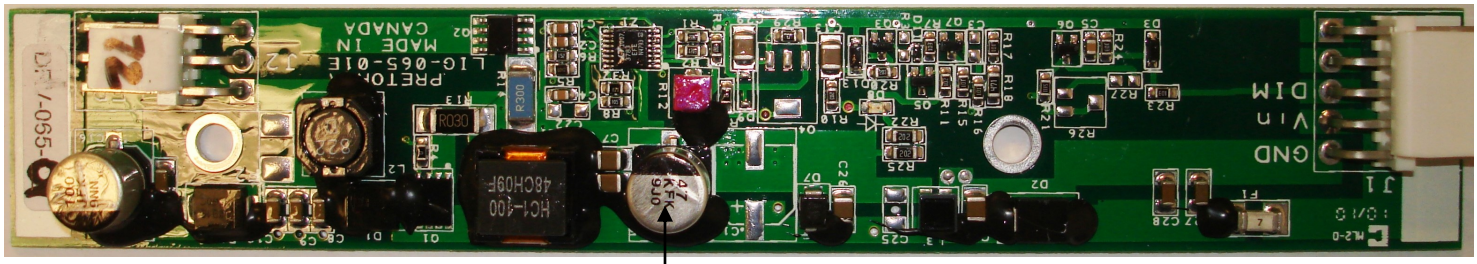
Existing DRV-065-XX LED Drivers

We offer the following information and pictures to assist in determining the Dim level output of existing LED drivers.

There are two LED drivers with part number DRV-065-XX that have a 10% or a 20% output level while in Dim mode. It is important to compare the existing LED driver to the below



The presence of two capacitors will result in a 10% light output while in Dim mode.



The presence of one capacitor will result in a 20% light output while in Dim mode.

For more information contact: