



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# SD3-120 Step-Dimming Series

Tri-Level dimming control modules,  
For use with 0-10V dimmable LED Drivers

Rev 8-8-2017

Intelligent Device  
**ECOSYSTEM**  
dynamic

## Electrical Specifications

Input Voltage Range:	120 Vac Nom. (100-132 V Min/Max)
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)
Max Pass Current:	1.0A @ 120Vac Input
Max LED Driver Power:	100W
Max Insertion Loss:	<1.5W @ 100W LED Driver
Class 2 Control Output:	0-10V (Current Sinking only, 50mA max)
Warranty:	5 years

## Environmental Specifications

Storage Temperature:	-40°C to +85°C
Max Case Temp:	75°C
Min Operating Temp:	-40°C
Humidity:	5% to 95%
Lifetime:	1,000,000 Switching Cycles



The SD3-120 works with two standard wall switches to provide quick switching between 3 levels of light output from LED luminaires.

- Two models: for 25-50-100 or 33-66-100 light output
- Works with 0-10V dimmable LED drivers
- Eliminates need for expensive dimmer unit
- Works with occupancy sensors
- Class 2 Output

### Two models:

- **SD3-25-120** provides 25-50-100% light output
- **SD3-33-120** provides 33-66-100% light output

Input Line Voltage		Driver Output Current	
Black/Red	Black/White	SD3-25-120	SD3-33-120
On	On	100%	100%
On	Off	<50%	<66%
Off	On	<25%	<33%
Off	Off	0%	0%

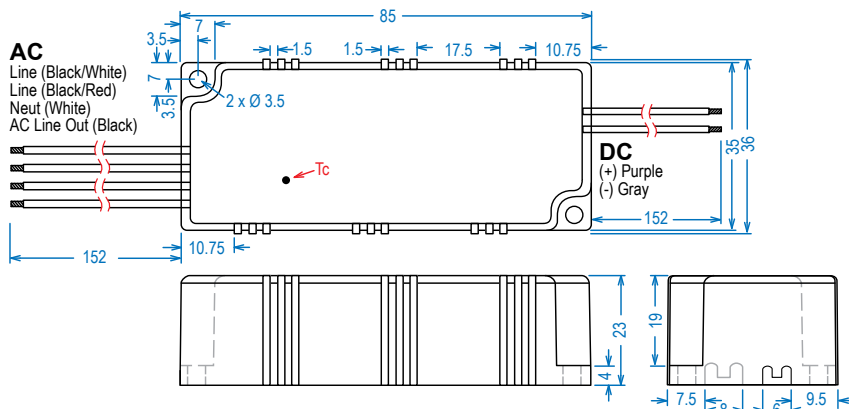
Contact TRP for custom output variants!

### NOTES:

1. Compatibility with 0-10V dimmable drivers manufactured by companies other than Thomas Research Products cannot be assured. Please contact your sales representative for a list of compatible drivers.
2. This device is designed to operate with standard wallbox switches only.
3. UL requires that these modules be installed within the luminaire enclosure.



## Dimensions



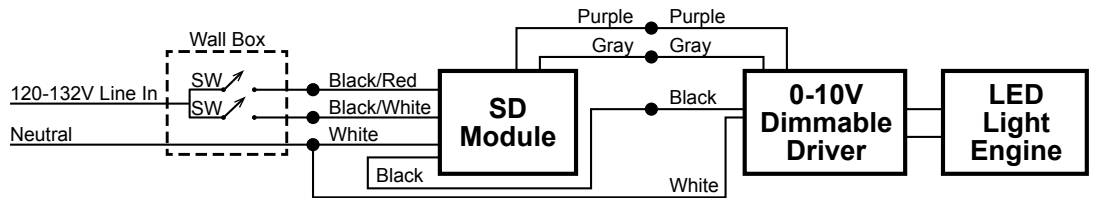
## Wiring Diagrams

### Standard Wiring:

**Note:**

Lead placement on wiring diagram is optimized for clarity, and not intended to reflect actual lead exit locations on SD case.

Wall switches S1 & S2 should be located next to each other to allow for Full ON / Low ON / OFF control.

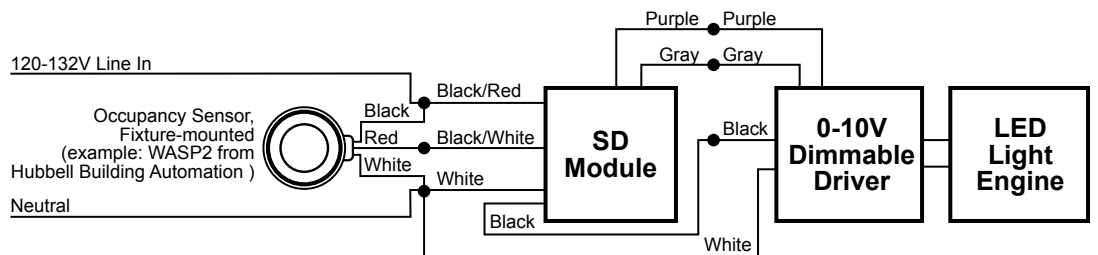


### Wiring with Occupancy Sensor:

**Example 1:**

Driver output is 100% when space is occupied, 50% with no occupancy (SD3-25)

Driver output is 100% when space is occupied, 66% with no occupancy (SD3-33)

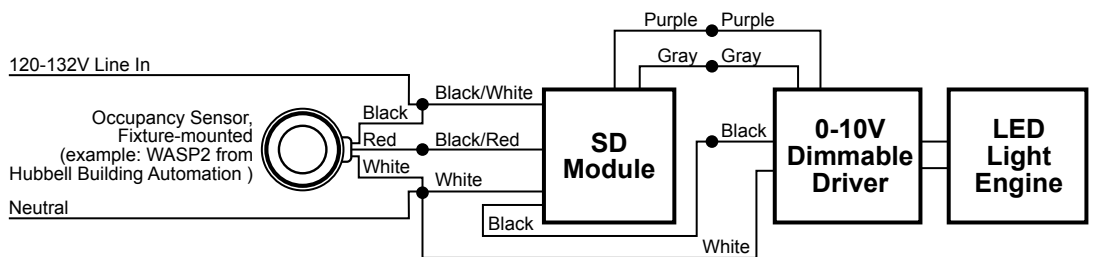


### Wiring with Occupancy Sensor:

**Example 2:**

Driver output is 100% when space is occupied, 25% with no occupancy (SD3-25)

Driver output is 100% when space is occupied, 33% with no occupancy (SD3-33)



**Note:**

Incoming power from branch must be on same phase. Do not use with multiple phases.