

SLD-DimTW2

DC/DC (0/1-10V + PWM) LED Dimming Module

GREAlpha® LED Power Specialists

Tunable White LED Dimming Module

The SLD DimTW2 is a CV Tunable White LED dimming module. This unique dimming module accepts 0-10V/1-10V control signal and enables smooth, dynamic color temperature shifts of 2000K to 8000K.
Depending on the application situation, this plug-and-play dimming module creates eye-catching, color temperature changing effects witout color distortion. The efficient Tunable White LED dimming module continues to be a pioneer in the market opening up ease of upgrade and options for color tuning applications that improves the dynamic of light.

Features

- Wide range DC input 8-48VDC
- Flicker free 0-100% dimming and color temperature changing
- High Efficiency up to 97%
- High precision dimming ratio : >1:1000
- Fully isolated plastic housing
- Comply with EN55015 and FCC Part 15 without additional input filter and capacitors
- Suitable for LED lighting and signage applications
- Compact size, high reliability
- 3 year warranty

Applications

- Architectural Lighting
- Effect & Contour Lighting
- Office General Illumination
- Warehouses
- Street Lighting
- Signage
- Strip Lighting
- Swimming Pools/Fountain lighting

Model	Input Voltage Range	Input Control	Channel Output	Output Voltage Range *	Max. Output Current (A) **	Max Output Power (W)	Power Efficiency (Typ)
SLD-DimTW2	8 - 48 V	2	2	Vin - 0.2~0.5V	5	240	97%

*- SLD-DimTW2 dimming module requires an external CV LED driver, connected to the DC input, and should not exceed the above input voltage range.

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Input Specification

Voltage Range	Please refer model table	Input Current	5.1A max (per channel)
Control Voltage	0/1-10VDC Dimmer *The external control source to the SLD-DIM purple and grey control wires should have the capability to sink a min. of 10mA for multiple SLD-DIM modules connected together. * A mininum sink current of 2mA is recommended for a single module	Control Range	0-100%v ˜1V = 0% light output 10V =100% light output
Short Circuit Protection	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition.	Over Voltage	Auto Recovery upon input voltage under Vin (max)
Over Temperature Protection	Auto recovery upon operating temperature <105°C	Under voltage Logout	Auto Recovery upon input voltage over Vin (min)

Output Specification

Output Frequency	1kHz PWM	Output Current	5A max. at full load **
Power Efficiency	97% Typ	Dimming Ratio	1:1000

** - SLD-DIM dimming module max. output current is dependent on LED driver output current , which should not exceed the Class 2 maximum of 5A or 100W per output channel.

Environmental Specification

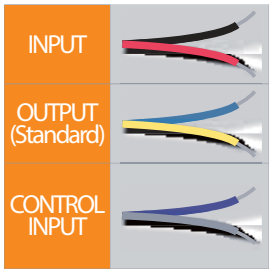
Ambient Temperature	Storage Temp	Relative Humidity
- 20°C - 60°C (Full Load)	- 40°C - 85°C	5% - 95 %

Compliance / Safety

Safety Standards:	UL244A
Weatherability:	IP 65

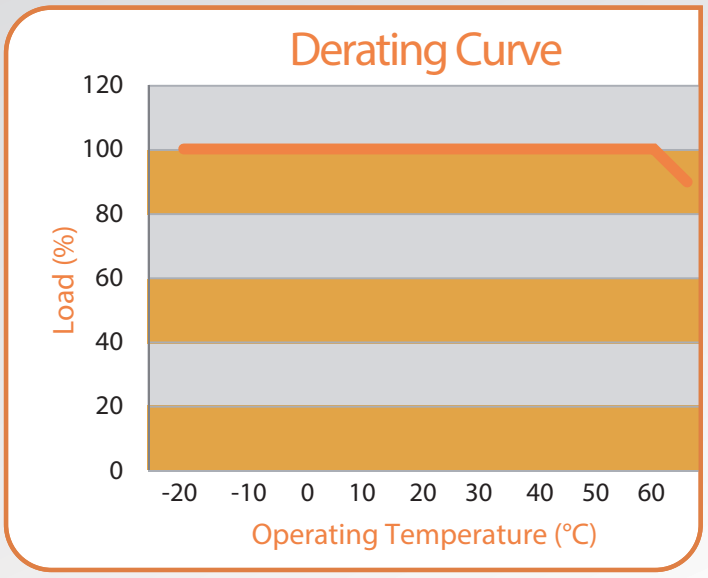
Mechanical Specification

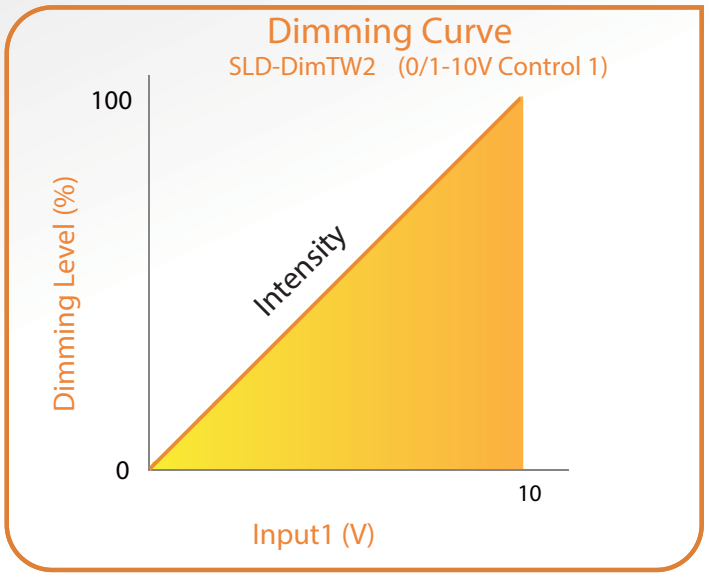
Power Unit Dimensions	98mm (L) x 44mm (W) x 14.5mm (H)
Case Design/Material	Polycarbonate White
Wire Length	6 inches 152.4mm
Wire Size	a. 18AWG standard, 300V, 105deg C (DC input and Dim Output wires) b.22AWG standard, 300V, 105deg C(0/1-10V control wires)

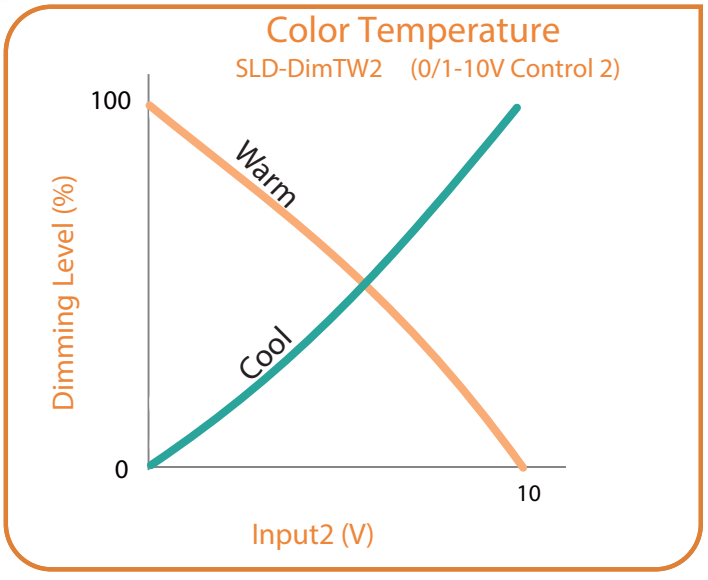


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Performance Curve



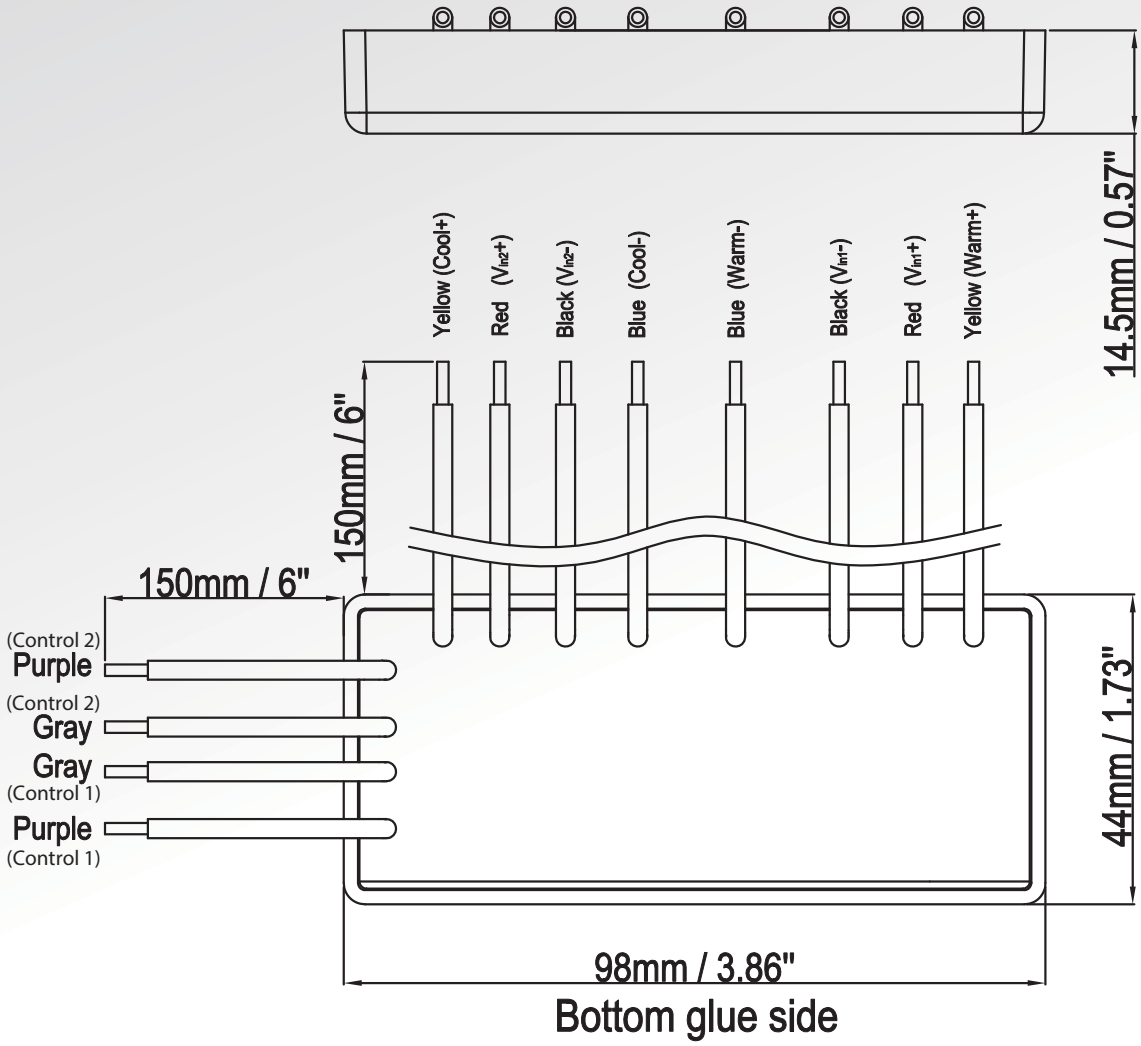




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Mechanical Diagram

SLD-DimTW2(Ver. B)



Input Wire	
Black	Vin1 -
Red	Vin1 +
Red	Vin2 +
Black	Vin2 -

Output Wire	
Yellow	Warm +
Yellow	Cool +
Blue	Warm -
Blue	Cool -

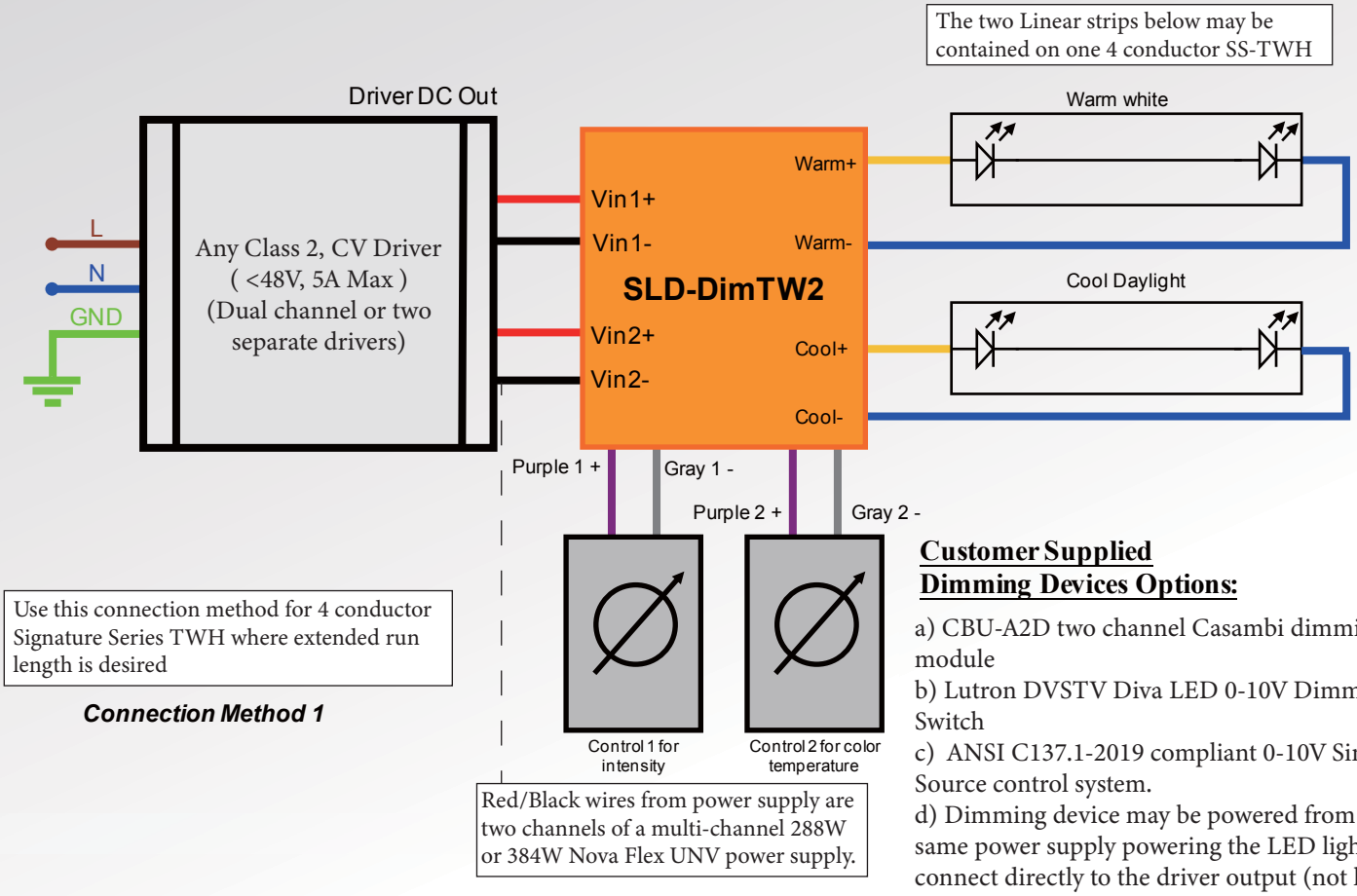
Control Wire	
Purple	to 0/1-10V Control 1
Gray	to 0/1-10V Control 1
Purple	to 0/1-10V Control 2
Gray	to 0/1-10V Control 2

Packing Information
0.10 kg/pcs ; 100pcs/carton;
12.0 kg /carton; L270xW220xH430 (mm)

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Wiring Diagrams

SLD-DimTW2

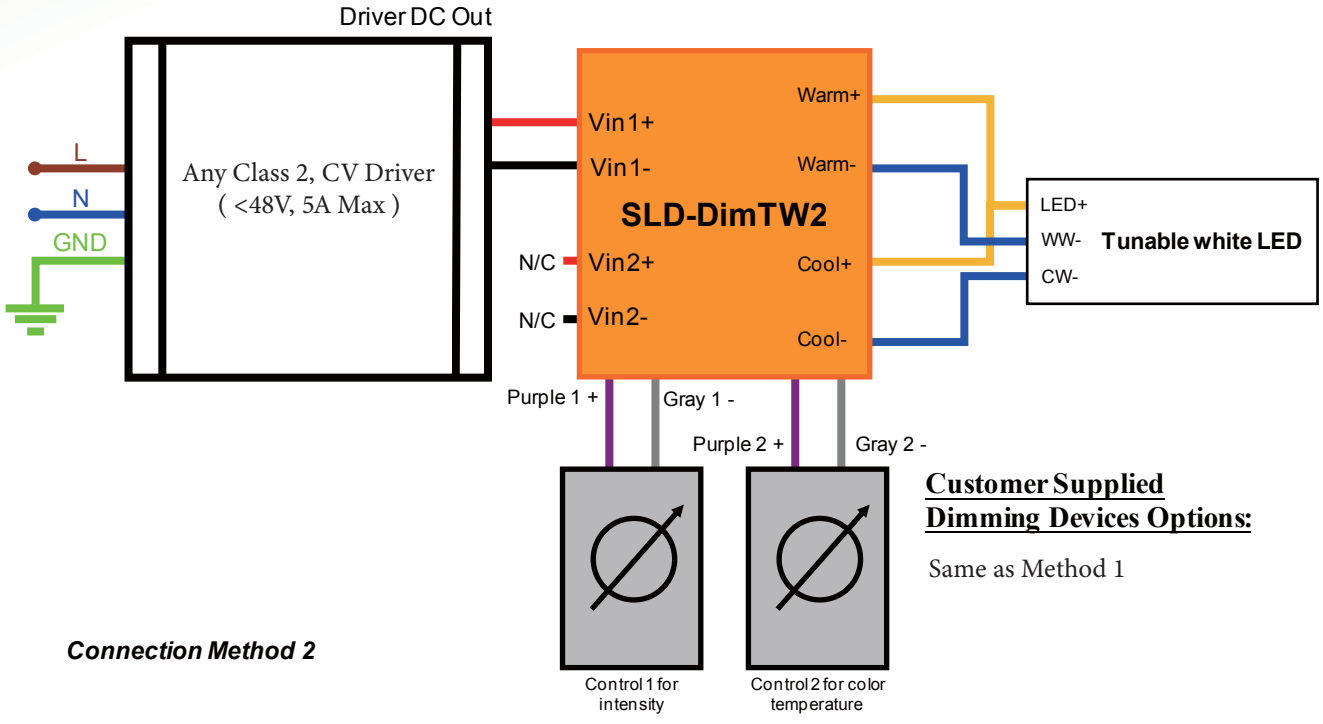


Use this connection method for 4 conductor Signature Series TWH where extended run length is desired

Connection Method 1

Customer Supplied Dimming Devices Options:

a) CBU-A2D two channel Casambi dimming module
b) Lutron DVSTV Diva LED 0-10V Dimmer Switch
c) ANSI C137.1-2019 compliant 0-10V Sink or Source control system.
d) Dimming device may be powered from the same power supply powering the LED lights; connect directly to the driver output (not load side of module).



Connection Method 2

Customer Supplied Dimming Devices Options:

Same as Method 1

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