

# 5 in 1 Dimmable Constant Voltage

## Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED Driver

### 可控硅&0-10V (5合1)调光电源

## Features

### 特性

- **Dim-all:** Triac/0-10V/1-10V/10V PWM/Potentiometer
  - ★ **Working Mode:** Switch to PWM or Voltage Reduce output
  - **Universal input:** 100-277Vac
  - **Dimming effect:**
    - Voltage Reduce mode:** 100%-0.01% dim, stepless dimming, flicker-free,
    - PWM dim mode:** 100-0.1% dim, flicker-free
  - **Triac dim mode:** Forward phase & reverse phase, MLV, ELV dim
  - Wet, damp, and dry location,
  - Title 24 JA8 compliant
  - Build in active PFC, typical power factor > 0.95, THD < 10% @ 120V Max. load
  - Constant voltage type, fine tune of output voltage
  - Super low loading request, works perfect at 10-100% load.
  - Short-circuit, over-temperature, over-load protection.
  - 7 years warranty
  - UL cUL listed, Class 2, Class P, Type HL, FCC, NEMA 4X, CE, RoHs
- 调光方式:** 可控硅/0-10V/1-10V/10V PWM/电阻调光
- ★ **工作模式:** 可切换PWM或降压输出
- 通用输入:** 100-277Vac
- 调光效果:**
- 降压模式:** 100%-0.01%调光, 无级调光, 无闪烁
- PWM 调光模式:** 100-0.1% 调光, 无闪烁
- 可控硅调光模式:** 正相和反相、MLV、ELV 调光
- 适用于潮湿、潮湿和干燥的位置
- Title 24 JA8 兼容
- 内置有源PFC, 典型功率因数 > 0.95, THD < 10% @ 120V Max. load
- 恒压型, 输出电压可微调
- 超低负载要求, 在 10-100% 负载下完美运行
- 短路、过温、过载保护
- 7年保修
- 认证:** UL/cUL, Class 2, Class P, Type HL, FCC, NEMA 4X, CE, ROHS

## Selling Points

### 卖点

- **1) Voltage Reduce Output**
  - √ Dimming range: 100%-0.01% Ultra Deep Amplitude for long-term using, and slow down the speed of lumen depreciation.
  - √ Works with single channel CCT warm-dim LED strip/tape (2 wires).
  - √ The output voltage peak is in the affordable value of the LED during driver on/off and dimming, no harm to the LED
  - **2) Compatible PWM & Voltage Reduce output**
  - √ compatible with RGBCW different LED fixture
  - √ compatible with DC-DC design LED fixture, such as MR16, PAR, wall washer, linear lighting, LED strip/type
- 1) 降压输出**
- √ 调光范围: 100%-0.01% 超深调光, 长期使用, 减缓流明衰减速度。
- √ 适用于单通道 CCT 暖调光 LED 灯条/灯带 (2 线)。
- √ 驱动器开/关和调光时输出电压峰值在LED可承受值内, 对LED无伤害
- 2) 兼容PWM和降压输出**
- √ 兼容RGBCW不同的LED灯具
- √ 兼容DC-DC设计的LED灯具, 如MR16、PAR、洗墙灯、线性照明、LED灯条/类型

## Application

### 应用

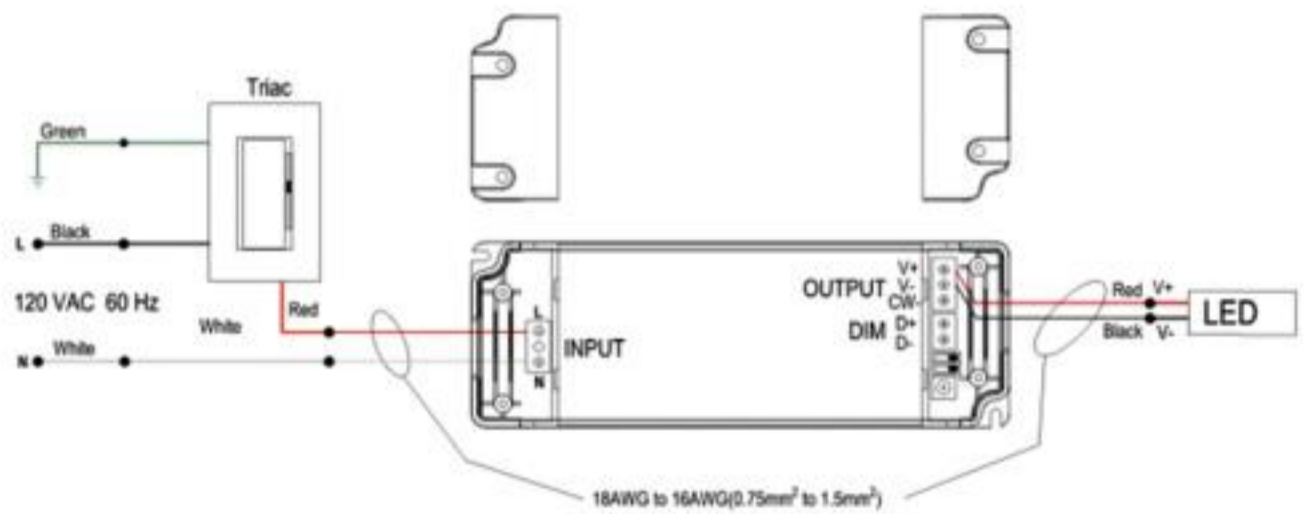
- LED strip/LED tape/LED module
  - Residential Lighting
  - Commercial Lighting
  - Indoor & outdoor LED illuminating lights.
  - LED Neon
  - LED City Decoration
- LED灯条/LED灯带/LED模组
- 住宅照明
- 商业照明
- 户内外LED照明灯光
- LED霓虹灯
- LED城市装饰灯

Model 型号	Cover Mteril 外壳材质	Output Voltge 输出电压 (Vdc)	Output Current 输出电流 (Amp)	Output Power 输出功率 (Watt)	Product Size 尺寸 (mm)	N/W 净重 (g)
SMT-12030-VTD-S	Plastic(IP20)	12V( 9-13V adjustable)	2.5A	30W	158*54*20	240
SMT-24030-VTD-S		24V(17-25V adjustable)	1.25A			
SMT-36030-VTD-S		36V( 27-37V adjustable)	0.83A			
SMT-48030-VTD-S		48V( 36-49V adjustable)	0.62A			
SMT-12060-VTD-S	Plastic(IP20)	12V( 9-13V adjustable)	5A	60W	212*56*24	390
SMT-24060-VTD-S		24V(17-25V adjustable)	2.5A			
SMT-36060-VTD-S		36V(27-37V adjustable)	1.66A			
SMT-48060-VTD-S		48V(36-49V adjustable)	1.25A			
SMT-12080-VTD-S	Plastic(IP20)	12V(9-13V adjustable)	6.6A	80W	212*56*24	390
SMT-24080-VTD-S		24V(17-25V adjustable)	3.3A			
SMT-36080-VTD-S		36V(27-37V adjustable)	2.22A			
SMT-48080-VTD-S		48V(36-49V adjustable)	1.66A			
SMT-24096-VTD-S	Plastic(IP20)	24V(17-25V adjustable)	4A	96W	212*56*24	390
SMT-48096-VTD-S		48V(36-49V adjustable)	2A			
SMT-12100-VTD-S	Plastic(IP20)	12V(9-13V adjustable)	8.33A	100W	212*56*24	390
SMT-24100-VTD-S		24V(17-25V adjustable)	4.17A			
SMT-36100-VTD-S		36V(27-37V adjustable)	2.77A			
SMT-48100-VTD-S		48V(36-49V adjustable)	2.08A			
SMT-12120-VTD-S	Aluminum (IP67)	12V(9-13V adjustable)	10A	120W	273.4*78*46	1730
SMT-24120-VTD-S		24V(17-25V adjustable)	5A			
SMT-36120-VTD-S		36V(27-37V adjustable)	3.33A			
SMT-48120-VTD-S		48V(36-49V adjustable)	2.5A			
SMT-12150-VTD-S	Aluminum (IP67)	12V(9-13V adjustable)	12.5A	150W	273.4*78*46	1730
SMT-24150-VTD-S		24V(17-25V adjustable)	6.25A			
SMT-36150-VTD-S		36V(27-37 Vadjustable)	4.16A			
SMT-48150-VTD-S		48V(36-49 Vadjustable)	3.15A			
SMT-12200-VTD-S	Aluminum (IP67)	12V(9-13 Vadjustable)	16.67A	200W	273.4*78*46	1730
SMT-24200-VTD-S		24V(17-25 Vadjustable)	8.33A			
SMT-36200-VTD-S		36V(27-37 Vadjustable)	5.55A			
SMT-48200-VTD-S		48V(36-49 Vadjustable)	4.16A			
SMT-12300-VTD-S	Aluminum (IP67)	12V(9-13 Vadjustable)	25A	300W	304.4*78*46	1730
SMT-24300-VTD-S		24V(17-25 Vadjustable)	12.5A			
SMT-36300-VTD-S		36V(27-37 Vadjustable)	8.33A			
SMT-48300-VTD-S		48V(36-49 Vadjustable)	6.25A			
<b>High Power Class2 120W-340W</b>						
SMT-12120-VTD2C-S (Multi 2x60W)	Aluminum (IP67)	12V(9-13 Vadjustable)	Multi 2x5A	120W (Class 2)	273.4*78*46	1730
SMT-12180-VTD3C-S (Multi 3x60W)		12V(9-13 Vadjustable)	Multi 3x5A	180W (Class 2)	273.4*78*46	1730
SMT-24192-VTD2C-S (Multi 2x96W)		24V(17-25 Vadjustable)	Multi 2x4A	192W (Class 2)	273.4*78*46	1730
SMT-48192-VTD2C-S (Multi 2x96W)		48V(36-49 Vadjustable)	Multi 2x2A			
SMT-24288-VTD3C-S (Multi 3x96W)		24V(17-25 Vadjustable)	Multi 3x4A	288W (Class 2)	304.4*78*48	2050
SMT-36288-VTD3C-S (Multi 3x96W)		36V(27-37 Vadjustable)	Multi 3x2.66A			
SMT-48288-VTD3C-S (Multi 3x96W)		48V(36-49 Vadjustable)	Multi 3x2A			
SMT-12300-VTD5C-S (Multi 5x60W)		12V(9-13 Vadjustable)	Multi 5x5A	300W (Class 2)	304.4*78*48	2050
SMT-24340-VTD4C-S (Multi4x85W)		24V(17-25 Vadjustable)	Multi4x3.54A	340W (Class 2)	304.4*78*48	2050
SMT-48340-VTD4C-S (Multi4x85W)		48V(36-49 Vadjustable)	Multi4x1.77A			

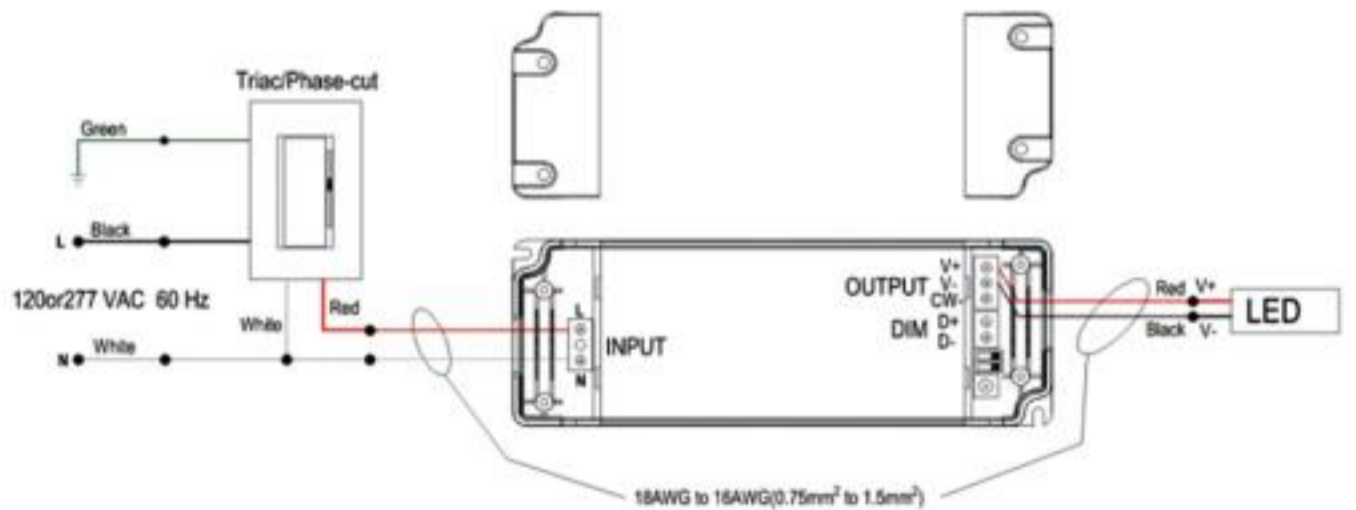


## Wiring Diagram(30W-100W) 接线图(30W-100W)

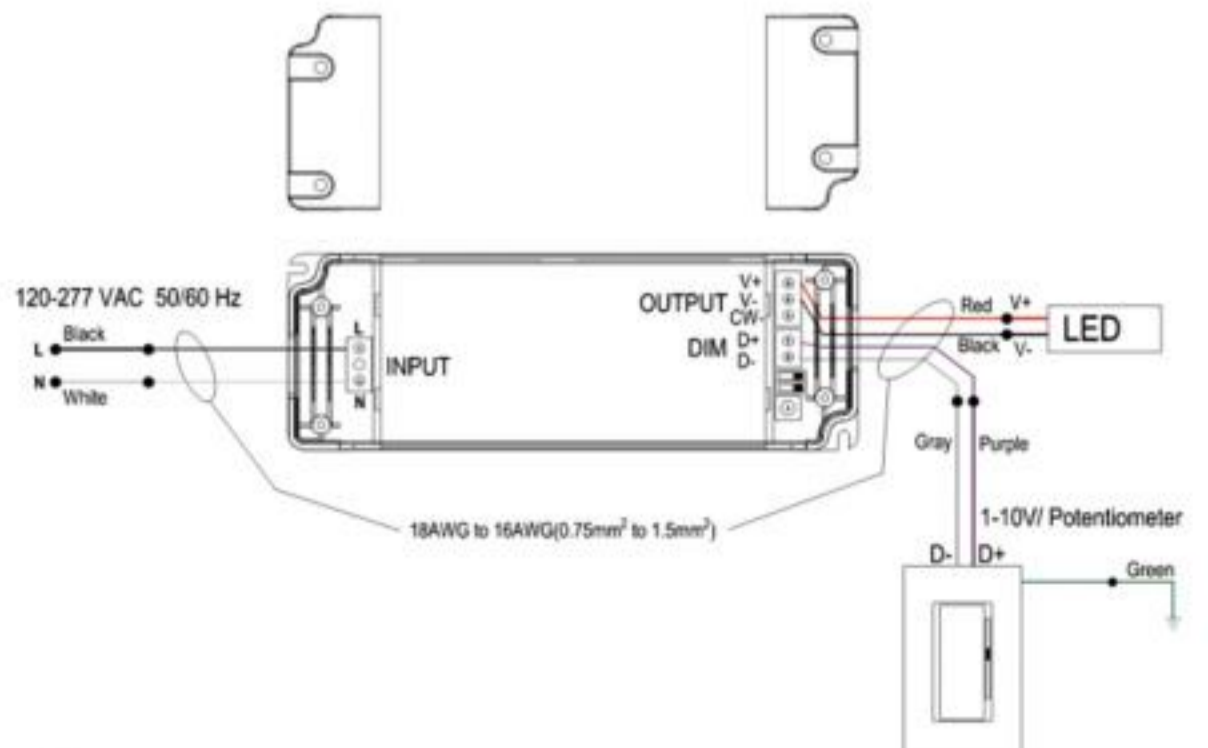
- 1) Triac dimming -Triac/MLV load type  
Notice: Not request neutral wire of dimmer.  
1) 可控硅调光-可控硅/MLV负载型  
注意：不要求调光器的零线。



- 2) Triac dimming- ELV load type  
Notice: Normally request neutral wire of dimmer.  
2) 双向可控硅调光-ELV负载型  
注意：通常要求调光器的零线。



- 3) 0-10V dimming-only dimming  
Notice: The dimmer can't cut off the power in this connecting way.  
3) 0-10V 调光  
注意：调光器不能以这种连接方式切断电源。

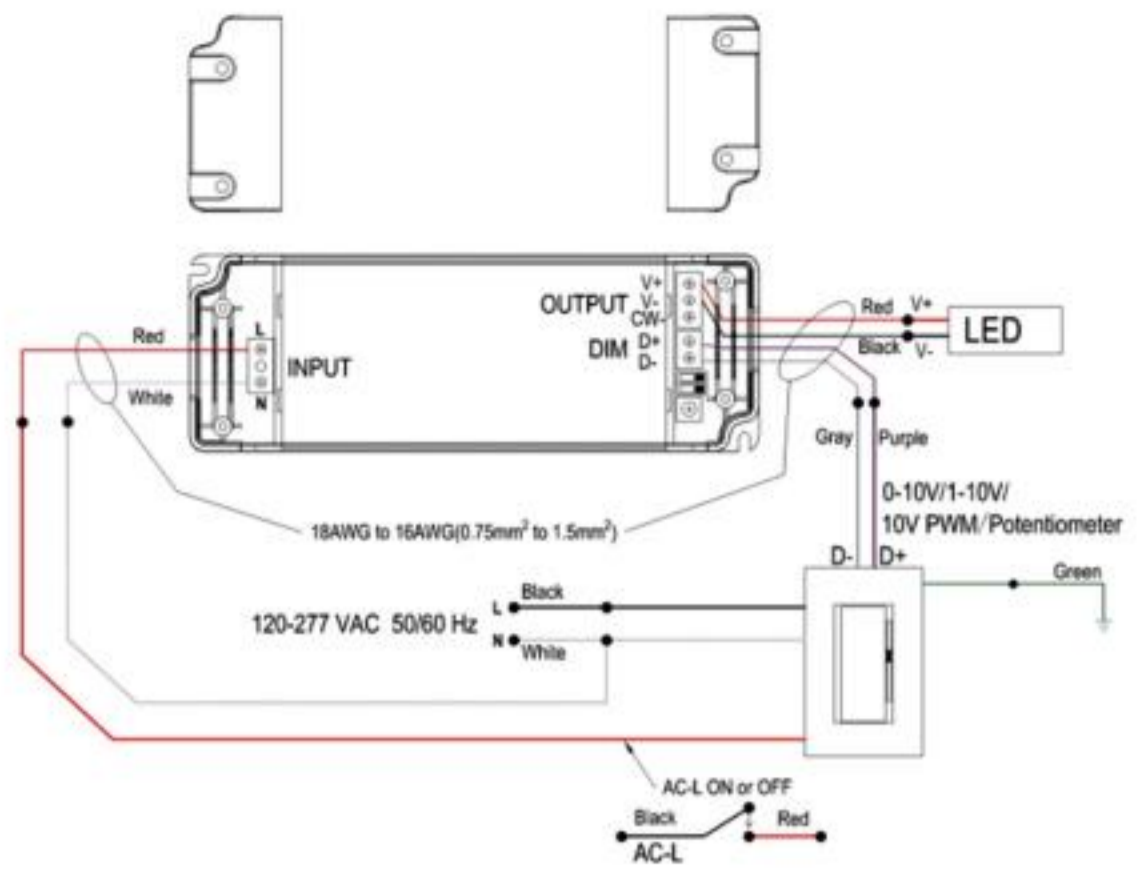


4) 0-10V dimming-only dimming

Notice: The dimmer can cut off the power in this connecting way.

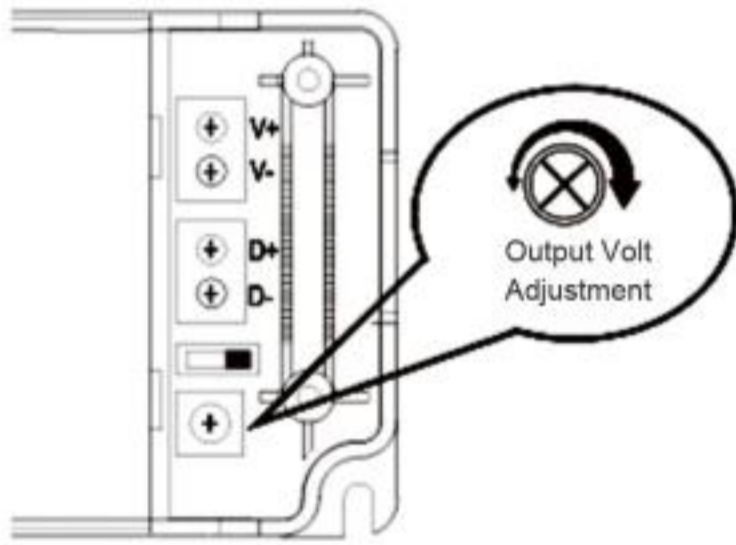
3) 0-10V 调光

注意：调光器不能以这种连接方式切断电源。



Fine tune output voltage

微调输出电压



NOTES:

1. Remove the output cover and screw it to fine tune the output voltage.

See below fine tune range

12V output: 9V-13V

24V output: 17V-25V

注意：

1. 取下输出盖并拧紧以微调输出电压。

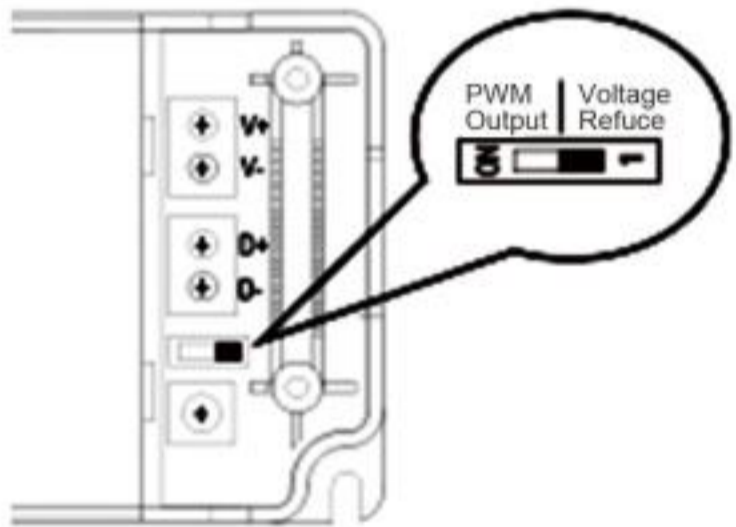
见下文微调范围

12V输出：9V-13V

24V输出：17V-25V

Switch to PWM output or voltage reduce dimming mode

切换到 PWM 输出或降压调光模式



NOTES:

1) Switch to "ON", the driver is PWM output mode.

2) Switch to "1", the driver is voltage reduce mode.

注意：

1) 切换到 "ON"，驱动器为PWM输出模式。

2) 切换到 "1"，驱动器为降压模式。

Product Display

产品展示



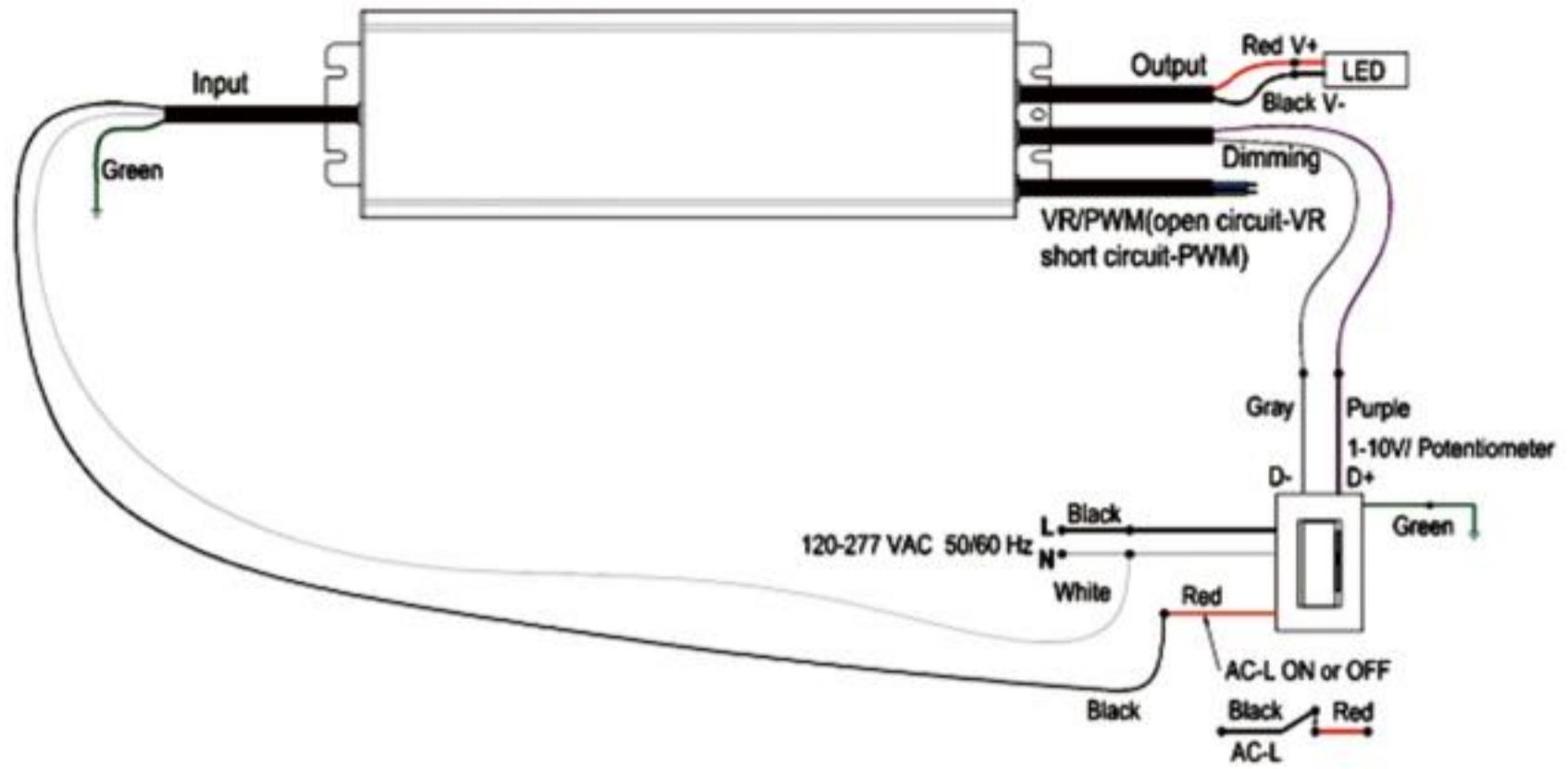


4) 0-10V dimming-only dimming

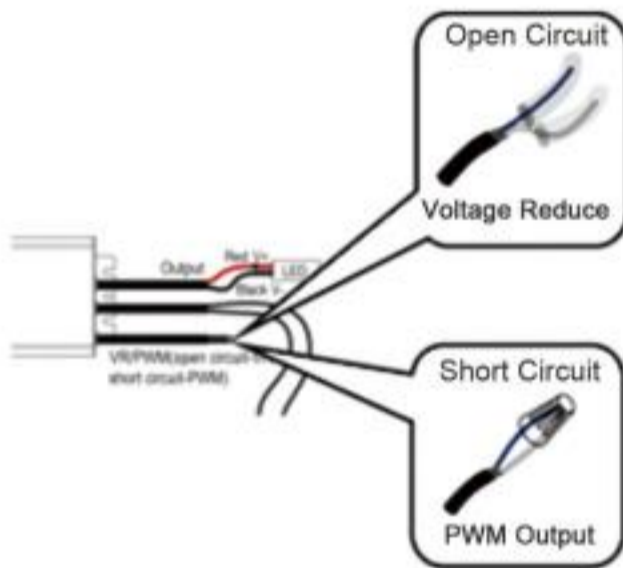
Note: The dimmer can cut off the power in this connecting way.

4) 0-10V 调光

注意：调光器可以通过这种连接方式切断电源。



Switch to PWM output or voltage reduce dimming mode  
切换到 PWM 输出或降压调光模式



NOTES:

1. Short circuit the blue and white wire, the driver is PWM output mode.
2. Open circuit the blue and white wire, the driver is voltage reduce mode.

注意：

1. 短接蓝白线，电源为PWM输出模式。
2. 蓝白线开路，电源器为降压模式。

Product Display  
产品展示



# 5 in 1 Dimmable Constant Voltage

## Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable J-Box LED Driver

### 可控硅&0-10V (5 合 1)调光壳机一体电源

## Features 特性

- **Dim-all:** Triac/0-10V/1-10V/10V PWM/Potentiometer
- ★ **Working Mode:** Switch to PWM or Voltage Reduce output
- **Universal input:** 100-277Vac
- **Dimming effect:**
  - Voltage Reduce mode:** 100%-0.01% dim, stepless dimming, flicker-free,
  - PWM dim mode:** 100-0.1% dim, flicker-free
- **Triac dim mode:** Forward phase & reverse phase, MLV, ELV dim
- Wet, damp, and dry location,
- Title 24 JA8 compliant
- Build in active PFC, typical power factor > 0.95, THD < 10% @ 120V Max. load
- Constant voltage type, fine tune of output voltage
- Super low loading request, works perfect at 10-100% load.
- Short-circuit, over-temperature, over-load protection.
- Exclusive patent design of "Clamshell" junction box
- Flexible wiring compartment to adjust the AC and DC wiring space
- 7 years warranty
- UL cUL listed, Class 2, Class P, Type HL, FCC,

**调光方式:** 可控硅/0-10V/1-10V/10V PWM/电阻调光

★ **工作模式:** 可切换PWM或降压输出

**通用输入:** 100-277Vac

**调光效果:**

**降压模式:** 100%-0.01%调光, 无级调光, 无闪烁

**PWM 调光模式:** 100-0.1% 调光, 无闪烁

**可控硅调光模式:** 正相和反相、MLV、ELV 调光

适用于潮湿、潮湿和干燥的位置

Title 24 JA8 兼容

内置有源PFC, 典型功率因数 > 0.95, THD < 10% @ 120V Max. load

恒压型, 输出电压微调

超低负载要求, 在 10-100% 负载下完美运行

短路、过温、过载保护

"翻盖" 接线盒专利设计

灵活的接线隔间, 可调节交直流接线空间

7年保修

**认证:** UL/cUL, Class 2, Class P, Type HL, FCC, NEMA 4X, CE, ROHS

## Selling Points 卖点

- **1) Voltage Reduce Output**
- √Dimming range: 100%-0.01% Ultra Deep Amplitude for long-term using, and slow down the speed of lumen depreciation.
- √Works with single channel CCT warm-dim LED strip/tape (2 wires).
- √The output voltage peak is in the affordable value of the LED during driver on/off and dimming, no harm to the LED
- **2) Compatible PWM & Voltage Reduce output**
- √compatible with RGBCW different LED fixture
- √compatible with DC-DC design LED fixture, such as MR16, PAR, wall washer, linear lighting, LED strip/type

### 1) 降压输出

√ 调光范围: 100%-0.01% 超深调光, 长期使用, 减缓流明衰减速度。

√适用于单通道 CCT 暖调光 LED 灯条/灯带 (2 线)。

√驱动器开/关和调光时输出电压峰值在LED可承受值内, 对LED无伤害

### 2) 兼容PWM和降压输出

√兼容RGBCW不同的LED灯具

√兼容DC-DC设计的LED灯具, 如MR16、PAR、洗墙灯、线性照明、LED灯条/类型

## Application 应用

- LED strip/LED tape/LED module
- Residential Lighting
- Commercial Lighting
- Indoor & outdoor LED illuminating lights.
- LED Neon
- LED City Decoration

LED灯条/LED灯带/LED模组

住宅照明

商业照明

户内外LED照明灯光

LED霓虹灯

LED城市装饰灯

Model 型号	Cover Mteril 外壳材质	Output Voltge 输出电压 (Vdc)	Output Current 输出电流 (Amp)	Output Power 输出功率 (Watt)	Product Size 尺寸 (mm)	N/W 净重 (g)
SMT-12030-VTDHV3	NEMA 4X	12V( 9-13V adjustable)	2.5A	30W	170.5*116*42	850
SMT-24030-VTDHV3		24V(17-25V adjustable)	1.25A			
SMT-36030-VTDHV3		36V( 27-37V adjustable)	0.83A			
SMT-48030-VTDHV3		48V( 36-49V adjustable)	0.62A			
SMT-12060-VTDHV3		12V( 9-13V adjustable)	5A	60W	226.5*117.5*42.5	1000
SMT-24060-VTDHV3		24V(17-25V adjustable)	2.5A			
SMT-36060-VTDHV3		36V( 27-37V adjustable)	1.66A			
SMT-48060-VTDHV3		48V( 36-49V adjustable)	1.25A			
SMT-12080-VTDHV3		12V( 9-13V adjustable)	6.6A	80W	226.5*117.5*42.5	1000
SMT-24080-VTDHV3		24V(17-25V adjustable)	3.3A			
SMT-36080-VTDHV3		36V( 27-37V adjustable)	2.22A			
SMT-48080-VTDHV3		48V( 36-49V adjustable)	1.66A			
SMT-24096-VTDHV3		24V(17-25V adjustable)	4A	96W	226.5*117.5*42.5	1000
SMT-48096-VTDHV3		48V( 36-49V adjustable)	2A			
SMT-12100-VTDHV3		12V( 9-13V adjustable)	8.33A	100W	226.5*117.5*42.5	1000
SMT-24100-VTDHV3		24V(17-25V adjustable)	4.17A			
SMT-36100-VTDHV3		36V( 27-37V adjustable)	2.77A			
SMT-48100-VTDHV3		48V( 36-49V adjustable)	2.08A			
SMT-12120-VTDHV3		12V( 9-13V adjustable)	10A	120W	254*132*42.5	1860
SMT-24120-VTDHV3		24V(17-25V adjustable)	5A			
SMT-36120-VTDHV3		36V( 27-37V adjustable)	3.33A			
SMT-48120-VTDHV3		48V( 36-49V adjustable)	2.5A			
SMT-12150-VTDHV3		12V( 9-13V adjustable)	12.5A	150W	254*132*42.5	1860
SMT-24150-VTDHV3		24V(17-25V adjustable)	6.25A			
SMT-36150-VTDHV3		36V( 27-37V adjustable)	4.16A			
SMT-48150-VTDHV3		48V( 36-49V adjustable)	3.15A			
SMT-12200-VTDHV3		12V( 9-13V adjustable)	16.67A	200W	254*132*42.5	1860
SMT-24200-VTDHV3		24V(17-25V adjustable)	8.33A			
SMT-36200-VTDHV3		36V( 27-37V adjustable)	5.55A			
SMT-48200-VTDHV3		48V( 36-49V adjustable)	4.16A			
SMT-12300-VTDHV3	12V( 9-13V adjustable)	25A	300W	289*132*49	2150	
SMT-24300-VTDHV3	24V(17-25V adjustable)	12.5A				
SMT-36300-VTDHV3	36V( 27-37V adjustable)	8.33A				
SMT-48300-VTDHV3	48V( 36-49V adjustable)	6.25A				
<b>High Power Class2 120W-340W</b>						
SMT-12120-VTDH2CV3 (Multi 2x60W)	NEMA 4X	12V(9-13 Vadjustable)	Multi 2x5A	120W (Class 2)	254*132*42.5	1860
SMT-12180-VTDH3CV3 (Multi 3x60W)		12V(9-13 Vadjustable)	Multi 3x5A	180W (Class 2)	254*132*42.5	1860
SMT-24192-VTDH2CV3 (Multi 2x96W)		24V(17-25 Vadjustable)	Multi 2x4A	192W (Class 2)	254*132*42.5	1860
SMT-48192-VTDH2CV3 (Multi 2x96W)		48V(36-49 Vadjustable)	Multi 2x2A			
SMT-24288-VTDH3CV3 (Multi 3x96W)		24V(17-25 Vadjustable)	Multi 3x4A	288W (Class 2)	289*132*42.5	2150
SMT-36288-VTDH3CV3 (Multi 3x96W)		36V(27-37 Vadjustable)	Multi 3x2.66A			
SMT-48288-VTDH3CV3 (Multi 3x96W)		48V(36-49 Vadjustable)	Multi 3x2A			
SMT-12300-VTDH5CV3 (Multi 5x60W)		12V(9-13 Vadjustable)	Multi 5x5A	300W (Class 2)	289*132*42.5	2150
SMT-24340-VTDH4CV3 (Multi4x85W)		24V(17-25 Vadjustable)	Multi4x3.54A	340W (Class 2)	289*132*42.5	2150
SMT-48340-VTDH4CV3 (Multi4x85W)		48V(36-49 Vadjustable)	Multi4x1.77A			

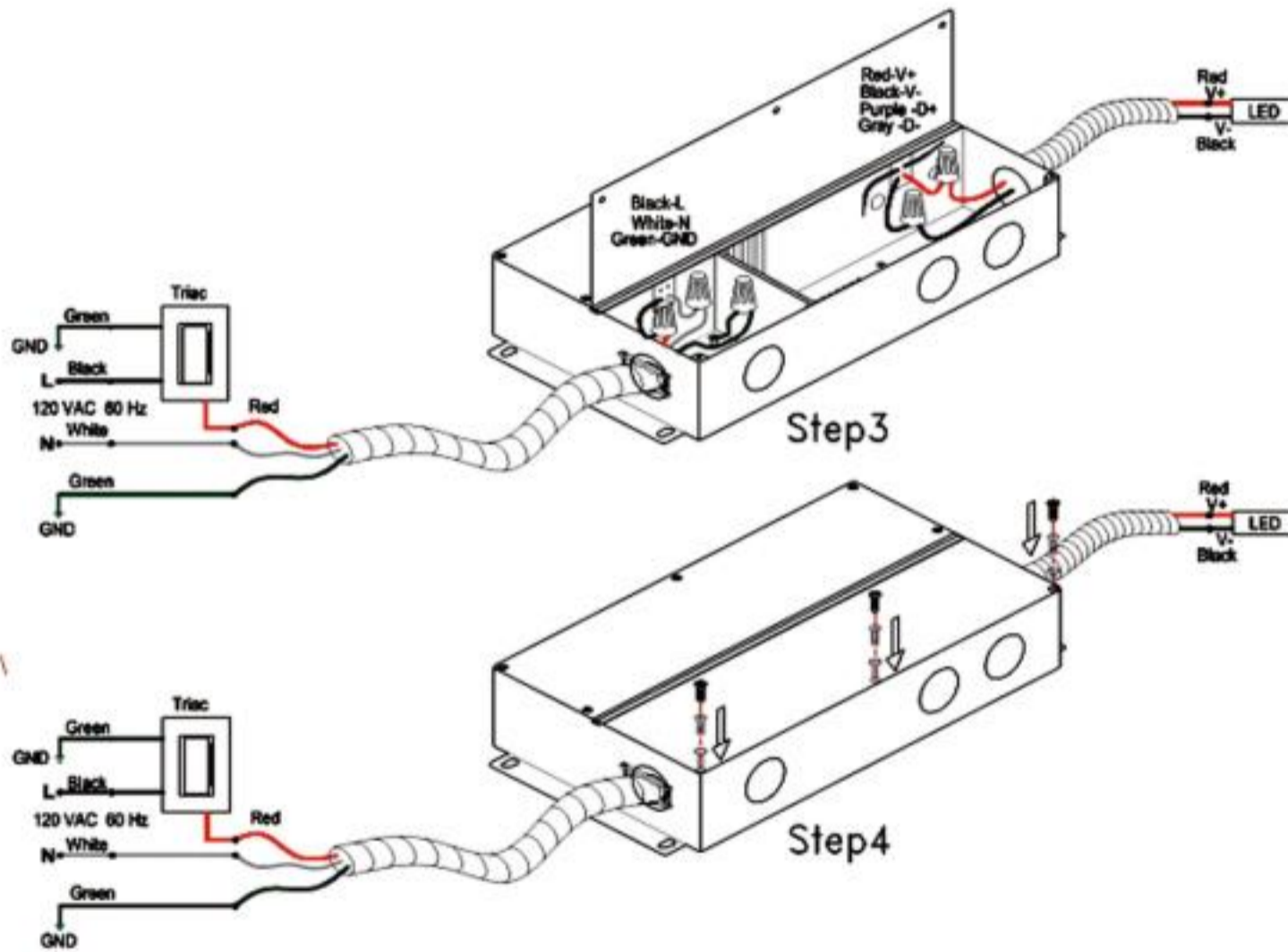




## Wiring Diagram 接线图

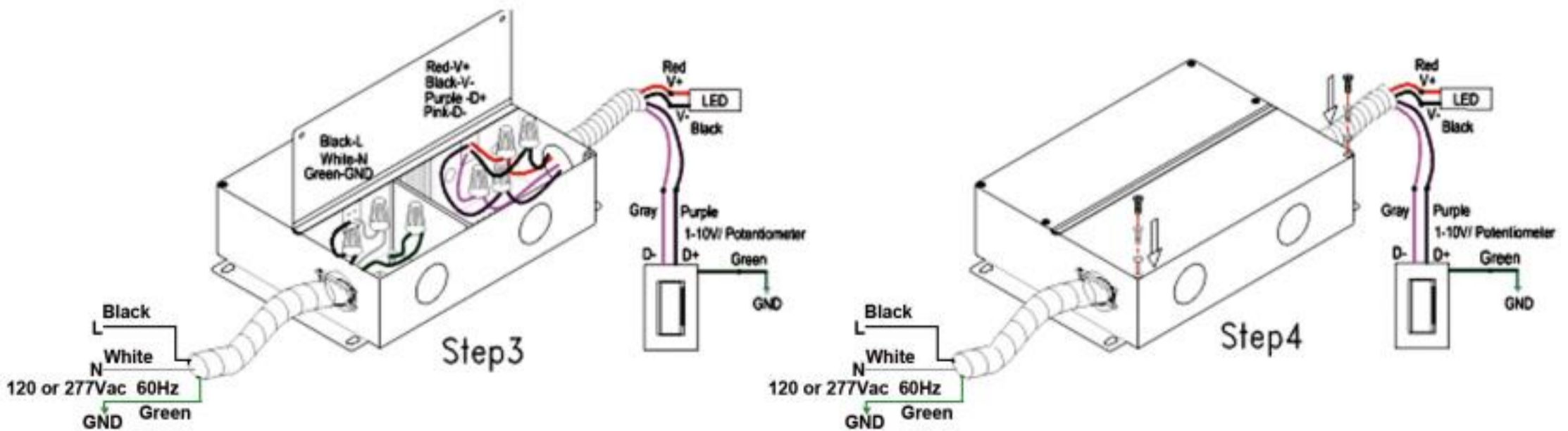
1) Triac dimming -Triac/MLV load type  
Note: Not request neutral wire of dimmer.

1) 可控硅调光-可控硅/MLV负载类型  
注意：不要求调光器的零线。



2) 0-10V dimming-only dimming  
Note: The dimmer can't cut off the power in this connecting way.

3) 0-10V 调光  
注意：此连接方式调光器不能断电。

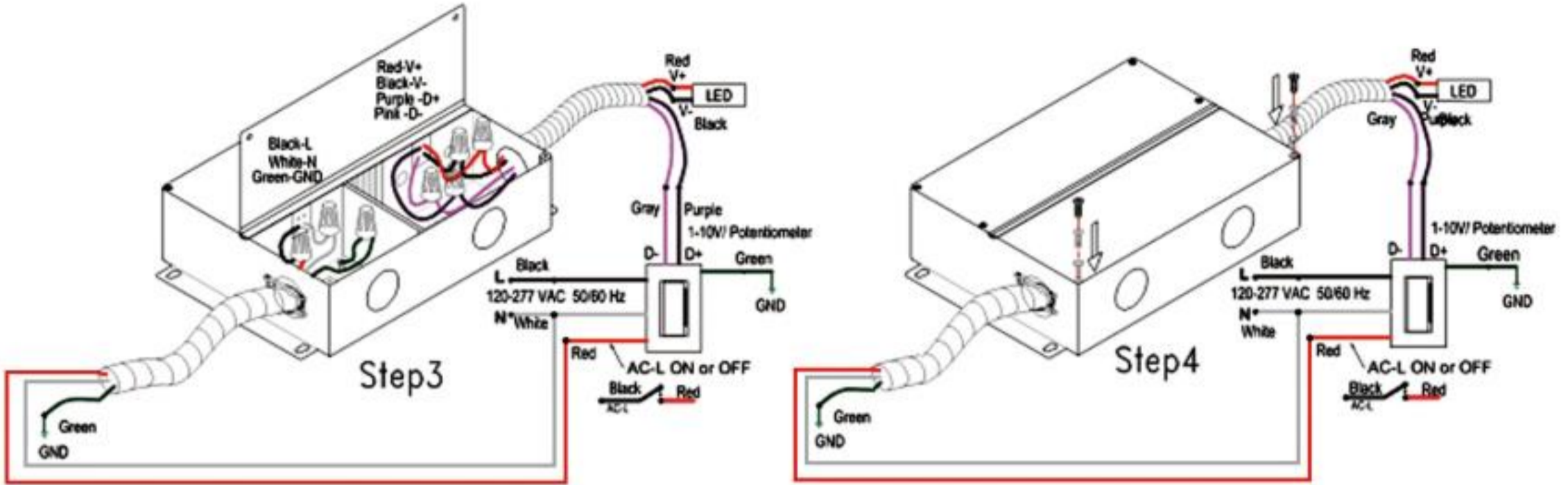


3) 0-10V dimming-only dimming

Note: The dimmer can cut off the power in this connecting way.

4) 0-10V 调光

注意：调光器可以通过这种连接方式切断电源。

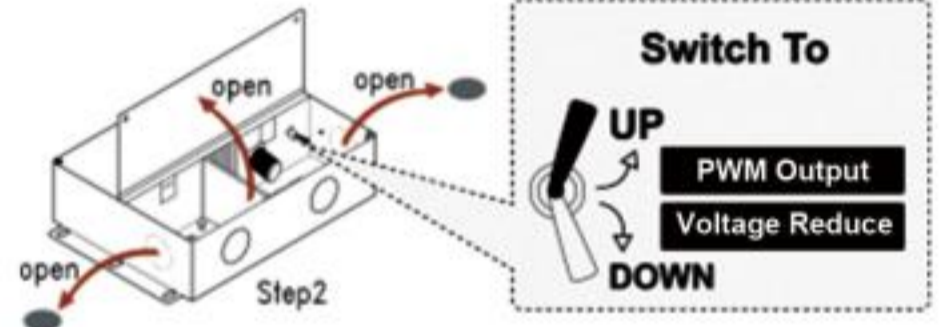
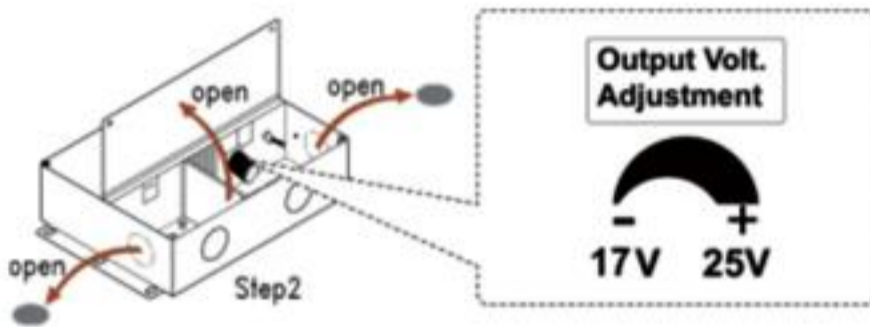


Fine Tune Voltage

微调电压

Switch to Different Output Mode

切换到不同的输出模式



See below fine tune range:  
12V output: 9V-13V  
24V output: 17V-25V

见以下微调范围：  
12V输出：9V-13V  
24V输出：17V-25V

Push up: PWM output mode  
Push down: Voltage reduce mode

上推：PWM输出方式  
下推：降压模式

Product Display

产品展示

