

The JBLD Series 5-in-1 dimmable LED power supply is engineered for professional and commercial LED lighting systems. It combines advanced performance, versatility, and durability to deliver ultra-smooth, flicker-free dimming across a variety of applications. This power supply regulates light output using TRIAC, 0–10V, 1–10V, PWM, or resistance dimming controls. With the junction box enclosure it is designed for reliable operation in damp and dry environments, making it suitable for both indoor and covered outdoor installations.

Model: \_\_\_\_\_ Date: \_\_\_\_\_  
Accessories: \_\_\_\_\_  
Job Name: \_\_\_\_\_ Type: \_\_\_\_\_



**ORDERING INFORMATION** (Example: JBLD-24V-96W)

Series	Voltage	Wattage
JBLD	12V = 12VDC	30W <sup>1</sup> = 30W (1 Channel)
	24V = 24VDC	40W <sup>1</sup> = 40W (1 Channel)
	48V = 48VDC	60W <sup>1</sup> = 60W (1 Channel)
		80W <sup>2</sup> = 80W (1 Channel)
		96W <sup>2</sup> = 96W (1 Channel)
NOTE:		96W <sup>2</sup> = 96W (1 Channel)
<sup>1</sup> Not available in 48V configuration		192W <sup>3</sup> = 192W (2 Channels, 96W x 2)
<sup>2</sup> Only available in 24V configuration		288W <sup>3</sup> = 288W (3 Channels, 96W x 3)
<sup>3</sup> Not available in 12V configuration		300W <sup>4</sup> = 300W (5 Channels, 60W x 5)
<sup>4</sup> Only available in 12V configuration		384W <sup>3</sup> = 384W (4 Channels, 96W x 4)

**TECHNICAL SPECIFICATIONS**

**Output**

	30W		40W		60W		80W	96W	192W		288W		300W	384W	
Output Voltage	12V	24V	12V	24V	12V	24V	24V	24V	24V	48V	24V	48V	12V	24V	48V
Output Current (Max.)	2.5A	1.25A	3.33A	1.66A	5A	2.5A	3.33A	4A	2 x 4A	2 x 2A	3 x 4A	3 x 2A	5 x 5A	4 x 4A	4 x 2A
Output Power Range	0-30W		0-40W		0-60W		0-80W	0-96W	0-192W		0-288W		0-300W	0-384W	
Output Ripple & Noise	≤600mV														
Dimming Interface	TRIAC / 0-10V / 1-10V / 10V PWM / RESISTANCE DIM														

**Input**

	30W	40W	60W	80W	96W	192W	288W	300W	384W	
Dimming Interface	TRIAC / 0-10V / 1-10V / 10V PWM / RESISTANCE DIM									
Input Voltage	100-277VAC					110-277VAC	120-277VAC			
Frequency	50/60Hz									
Input Current	0.5A @ 110VAC	0.62A @ 120VAC		0.9A @ 110VAC	1A @ 110VAC	2.2A @ 110VAC	3.2A @ 110VAC	3.4A @ 110VAC	3.9A @ 110VAC	
Surge Current	20A @ 120VAC									
Efficiency (Typ.)	80% @ 220VAC		87% @ 220VAC			85% @ 220VAC				
Power Factor	0.98 @ 100VAC								0.98 @ 120VAC	

Specifications are subject to change without notice. Installation must be performed in accordance with Barron Lighting Group installation instructions.

## Environment

	30W	40W	60W	80W	96W	192W	288W	300W	384W
Working Temperature	-30°C - 60°C			-40°C - 60°C					
IP Rating	IP64								
Working Humidity	20-90%RH								
Storage Temp., Humidity	-40°C - 80°C, 10-95%RH								
Vibration	10-500Hz, period for 15min. each along X, Y, Z axis								
Tcase	+90°C								

## Protection

	30W	40W	60W	80W	96W	192W	288W	300W	384W
Over Temperature	100°C±10°C shut down voltage automatically and recover after cooling.								
Over Voltage Protection	Shut down the output when non-load voltage ≥14V (12VDC) or ≥28V (24VDC) and recover automatically					Shut down the output when non-load voltage ≥28V (24VDC) or ≥60V (48VDC) and recover automatically			
Short Circuit Protection	Hiccup Mode and recover automatically								

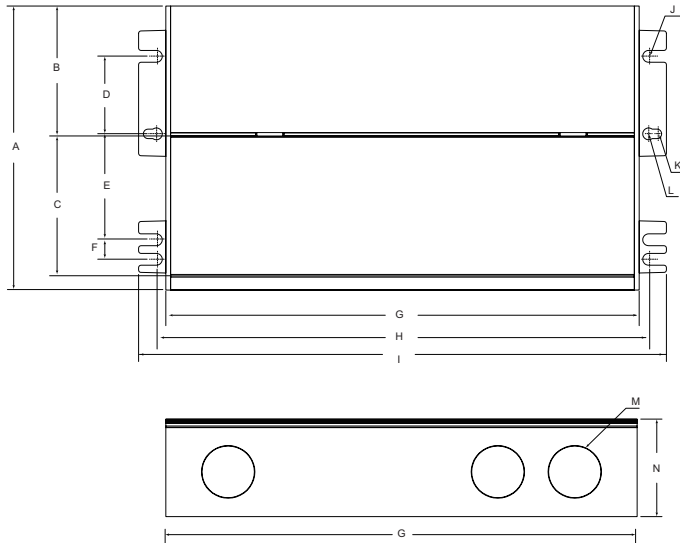
## Safety & EMC

	30W	40W	60W	80W	96W	192W	288W	300W	384W
Safety Standards	UL8750								
Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH								
Grounding Resistance	≤0.5Ω								

## Others

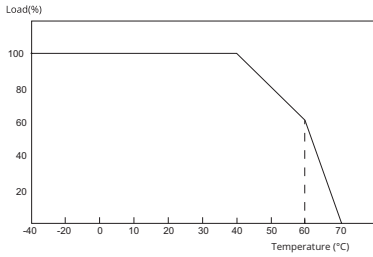
	30W	40W	60W	80W	96W	192W	288W	300W	384W
Lifetime	50,000 hours at Tc ≤ 80°C maximum case hot spot temperature								
Weight	1.54lbs (0.7kg)			2.76lbs (1.25kg)		3.86lbs (1.75kg)		5.95lbs (2.7kg)	

## DIMENSIONS



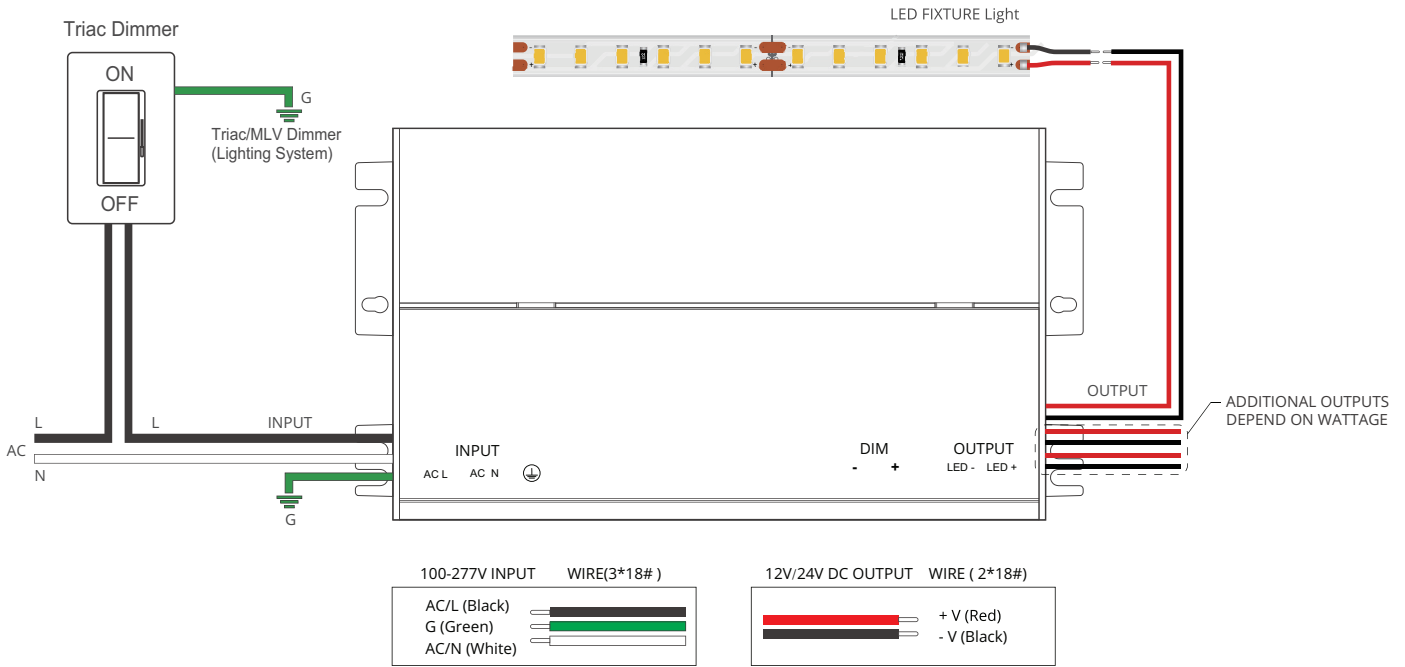
Dim.	30W	40W	60W	80W	96W	192W	288W	300W	384W
A	3.94" (100mm)		4.72" (120mm)		5.19" (132mm)				
B	1.46" (37mm)		2.28" (58mm)		2.48" (63mm)				
C	2.52" (64mm)					2.56" (120mm)			
D	0.51" (13mm)			1.29" (33mm)					
E	1.77" (45mm)			1.77" (45mm)					
F	0.315" (8mm)		0.35" (9mm)		0.59" (15mm)				
G	6.97" (177mm)		7.87" (200mm)		9.05" (230mm)		9.25" (235mm)		
H	7.28" (185mm)		8.19" (208mm)		9.37" (238mm)		9.57" (243mm)		
I	7.87" (200mm)		8.82" (224mm)		10" (254mm)		11.38" (289mm)		
J						Ø0.18" (4.6mm)			
K						Ø0.15" (3.8mm)			
L						Ø0.18" (4.6mm)			
M						Ø0.86" (22mm)			
N	1.67" (42.5mm)					1.81" (46mm)			

## DERATING CURVE

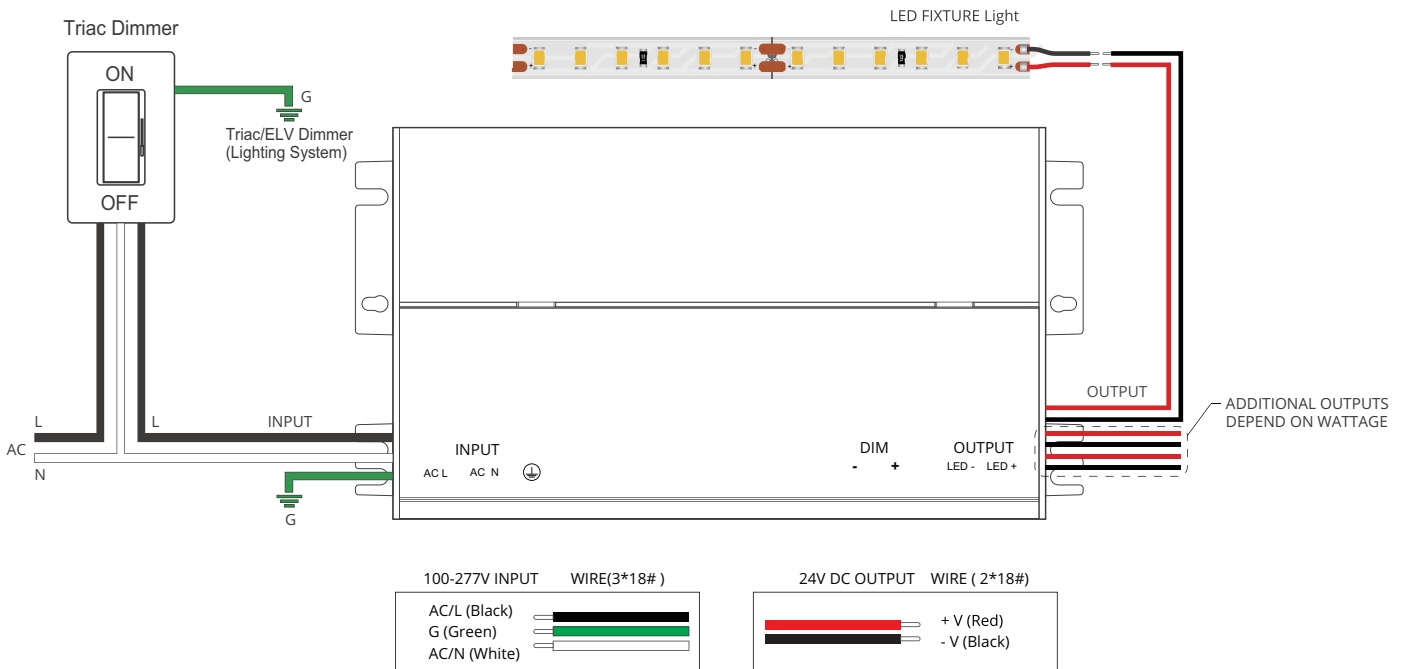


## WIRING DIAGRAMS

### TRIAC Dimming (MLV Load Type)

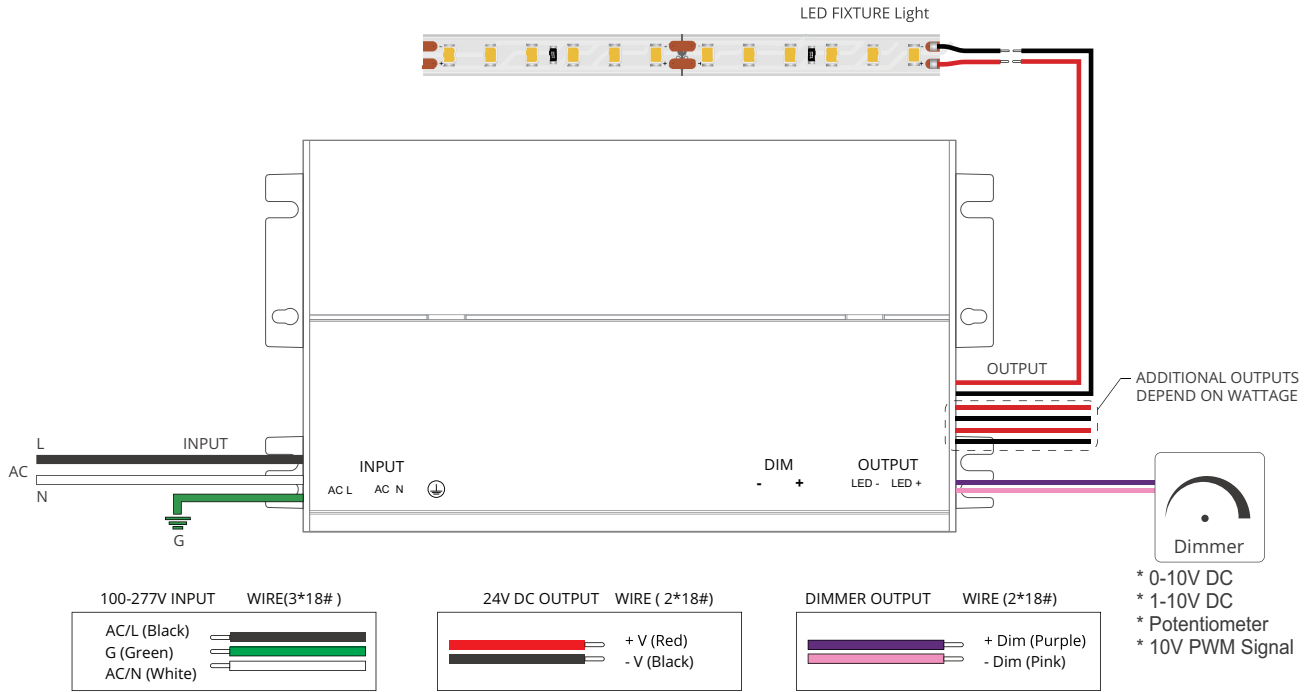


### TRIAC Dimming (ELV Load Type)

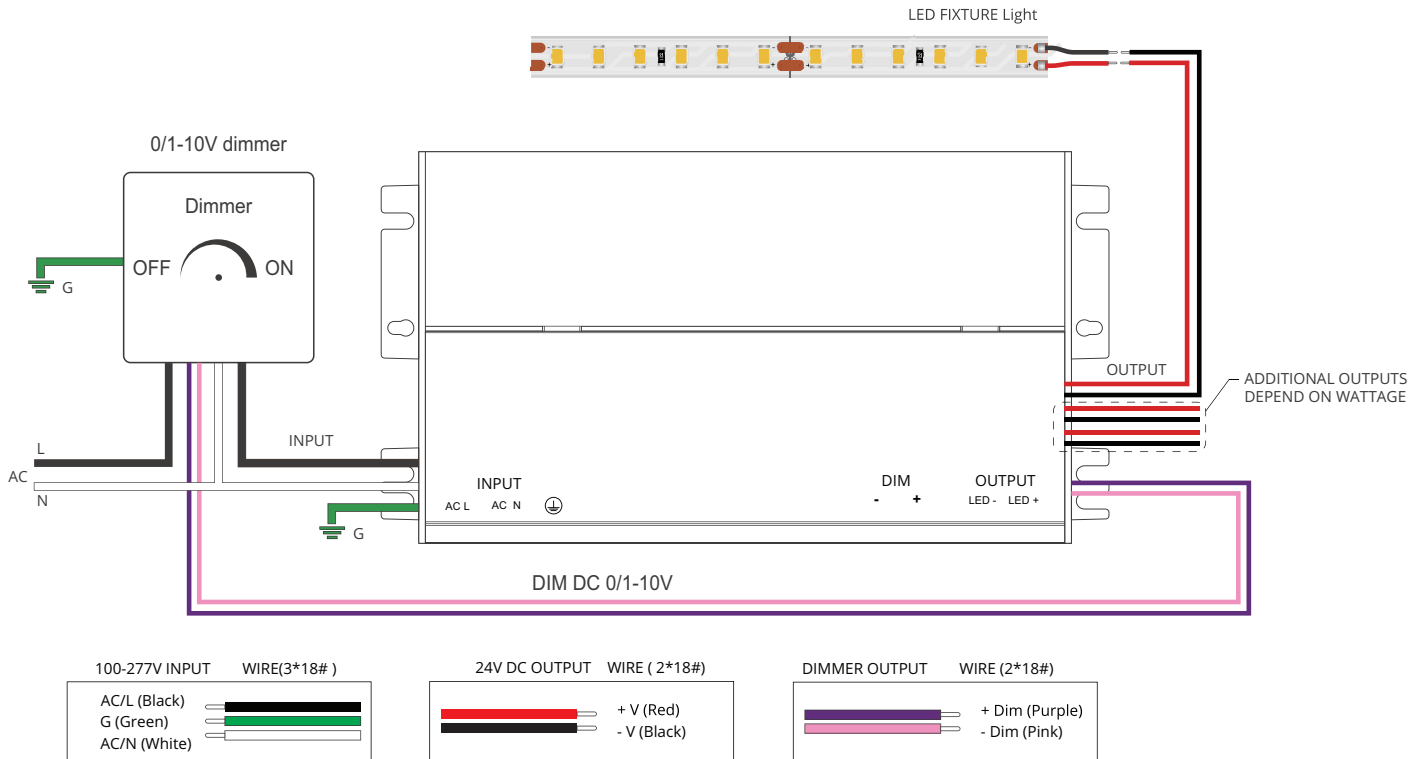


# WIRING DIAGRAMS

## 0-10V Dimming (No Power Pack)



## 0-10V Dimming



\*\*If utilizing power pack, refer to third party manufacturer's Instruction Guide.