UNIVERSAL DIMMING LED POWER SUPPLY 24V DC HARDWIRE IN JUNCTION BOX ENCLOSURE

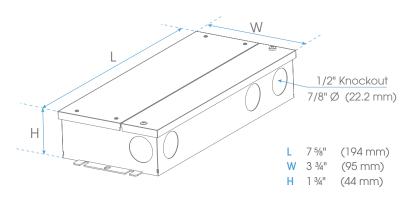


Fixture Type

Project

Notes





The DL-PS-XX/24-JB-OD-UNI-DIM series is an Outdoor Class 2 Universal Dimming 24V Power Supply with Junction Boxes for 30W, 60W, 96W, 96Wx2, 96Wx3, 96Wx4. It works with Forward phase, Reverse Phase, or 0-10V dimmers. With universal input voltage - 100 to 277V AC, it provides smooth, flicker-free PWM dimming (PWM Frequency: 800Hz), IP66, indoor/outdoor - for dry, damp, and wet locations. Cooling by free air convection. Load 10-100%, short circuit, over-temperature, and overloading protection. Built-in PFC function, it is also UL8750 Listed and Class 2 power unit. Weights only 1.1kg (2.4lb.), includes (6) 7/8" knockouts metal enclosures.



















### **SPECIFICATIONS**

TYPE HL

INPUT			
INPUT VOLTAGE	100 - 277V AC		
INPUT FREQUENCY	47-63Hz		
INPUT CURRENT (MAX.)	0.9A @100V AC		
POWER FACTOR (TYP.) @ FULL LOAD	0.98 @ 120V AC		
	0.95 @ 277V AC		
EFFICACY (TYP.) @ FULL LOAD	83% @ 120V AC		
	84% @ 277V AC		
INDUCU CURRENT (TVD)	14A, 50%, 780µs @ 120V AC		
INRUSH CURRENT (TYP.)	15A, 50%, 660µs @ 277V AC		
THD (TYP.) @ FULL LOAD	<20%		
LEAKAGE CURRENT	<0.50mA		

OUTPUT VOLTAGE	24V DC
RATED OUTPUT POWER	60W
RATED LOAD CURRENT	2.50A
VOLTAGE TOLERANCE	+/-0.5V
VOLTAGE REGULATION	+/-0.5%
LOAD REGULATION	+/-1%

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IP RATINGS	IP66, Indoor/Outdoor – For Dry, Damp		
- KAINOS	and Wet locations		
OPERATING AMBIENT TEMPERATURE	-40°C to +60°C		
	(-40°F to +140°F)		
OPERATING AMBIENT HUMIDITY	20~90% RH, non-condensing		
STORAGE TEMPERATURE	-40°C to +80°C		
	(-40°F to +176°F)		
STORAGE HUMIDITY	10~95% RH		
TEMPERATURE COEFFICIENT	+/-0.03%/°C (0~50°C)		
VIBRATION	10~500Hz, 5G 10min./1 cycle period		
	for 60min, each along X, Y and Z axes		

\$\frac{1}{2} \text{See Derating Curve}\$

#### SAFETY & EMC \_\_\_\_\_

SAFETY STANDARDS	UL8750
WITHSTAND VOLTAGE	I/P-O/P:1.88KV AC
ISOLATION RESISTANCE	I/P-O/P:100MΩ / 500V DC / 25°C /
ISOLATION RESISTANCE	70% RH
EMC EMISSION	FCC Part 15 B

#### PROTECTION .

**CLITPLIT** 

SHORT CIRCUIT	Shut down o/p voltage, re-power on to recover after fault condition is removed			
<b>OVER LOADING</b> ≤120% Hiccup mode, recovers automatically after fault condition is removed				
OVER TEMPERATURE	212°F+/-50°F (100°C +/-10°C) shut down o/p voltage, automatically recover after cooling			





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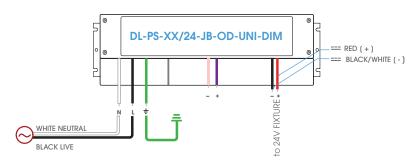
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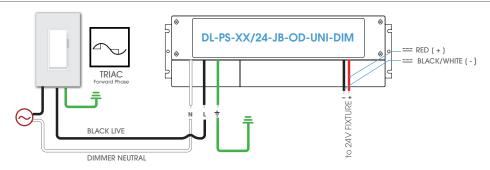
Notes

#### **WIRING DIAGRAM**

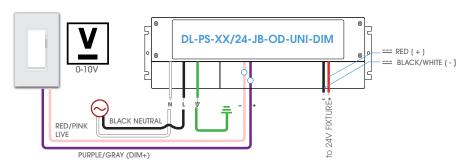
TYPICAL DIRECT WIRING: NON DIMMING APPLICATIONS



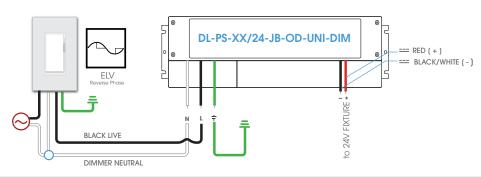
#### TYPICAL DIRECT WIRING: TRIAC DIMMING



#### TYPICAL DIRECT WIRING: 0 - 10 DIMMING (LOW VOLTAGE 0 - 10V DIMMER)



#### TYPICAL DIRECT WIRING: ELV DIMMING





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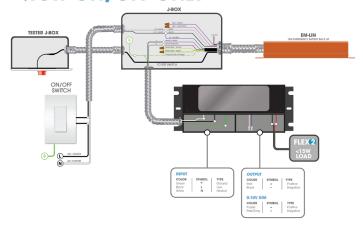
Notes

## WIRING DIAGRAM • CONNECT TO OPTIONAL EM-LIN

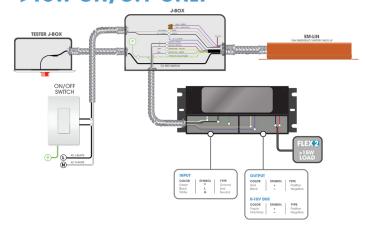
EMERGENCY BATTERY BACK UP ADAPTIVE CONSTANT OUTPUT POWER

For use up to **60W load** with 90 min. operational time Any load exceeding the max EM output requires connecting dimming wires as shown in the diagrams.

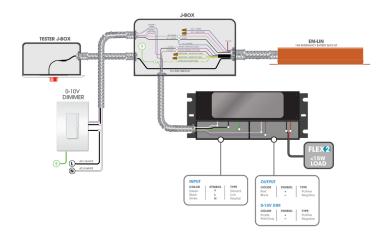
#### <15W ON/OFF ONLY



#### >15W ON/OFF ONLY

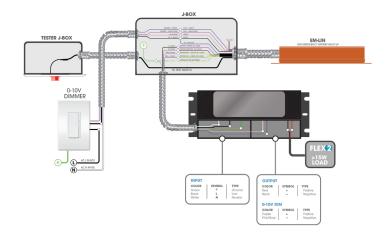


#### <15W 0-10V DIMMING



#### **EM-LIN**

## >15W 0-10V DIMMING





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Fixture Type

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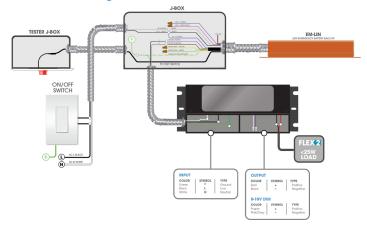
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## WIRING DIAGRAM • CONNECT TO OPTIONAL EM-LIN

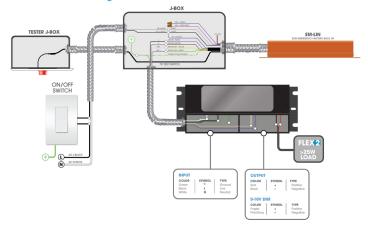
EMERGENCY BATTERY BACK UP ADAPTIVE CONSTANT OUTPUT POWER

For use up to **96W load** with 90 min. operational time Any load exceeding the max EM output requires connecting dimming wires as shown in the diagrams.

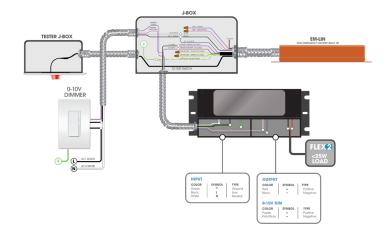
#### <25W ON/OFF ONLY



#### >25W ON/OFF ONLY

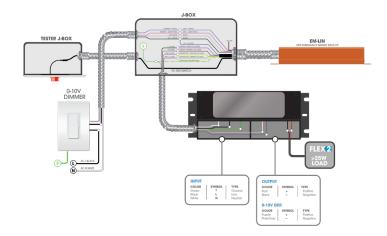


#### <25W 0-10V DIMMING



### **EM-LIN**

## >25W 0-10V DIMMING





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### **RECOMMENDED DIMMERS**

BRAND	MODEL NUMBER	TYPE	INPUT VOLTAGE RANGE	DIMMING RANGE
	SCL-153PR-WH	Forward Phase	100-130V	0-100%
	DVCL-153PR-WH	Forward Phase	100-130V	0-100%
	DVWCL-153PH-LA	Forward Phase	100-130V	0-100%
	CTCL-153PDH-LA	Forward Phase	100-130V	0-100%
	TGCL-153PR-WH	Forward Phase	100-130V	0-100%
	TGCL-153PH-WH	Forward Phase	100-130V	0-100%
	MACL-153MH-LA	Forward Phase	100-130V	20-100%
	CT-600PR-IV	Forward Phase	100-130V	0-100%
	CT-600PR-WH	Forward Phase	100-130V	0-100%
	CT-103PR-WH	Forward Phase	100-130V	0-100%
	DV-600PR-BL	Forward Phase	100-130V	0-100%
	DV-600PR-WH	Forward Phase	100-130V	0-100%
	MIR-600M	Forward Phase	100-130V	2-100%
	TG-600PR-LA	Forward Phase	100-130V	4-100%
Z	TG-600PR-IV	Forward Phase	100-130V	0-100%
UTRON	TG-600PR-WH	Forward Phase	100-130V	0-100%
Ę	TG-10PR-WH	Forward Phase	100-130V	0-100%
3	S-600PR-WH	Forward Phase	100-130V	0-100%
	MRF2-6ND-120-AL	Forward Phase	100-130V	0-100%
	MSCELV-600M	Reverse Phase	100-130V	0-100%
	MEF2-6ELV-120	Reverse Phase	100-130V	0-100%
	MRF2-6CL-GR	Forward Phase	100-130V	15-100%
	DZ6HD	Forward Phase	100-130V	22-100%
	PD-6WCL	Forward Phase	100-130V	19-100%
	PD-5NE-WH	Forward Phase	100-130V	18-100%
	NTLV-600-277-WH	Forward Phase	277V	1-100%
	ST-12P-277	Forward Phase	277V	12-100%
	NTF-10-277	Forward Phase	277V	1-100%
	DVELV-300P-WH	Reverse Phase	100-130V	20-100%
	SELV-300P	Reverse Phase	100-130V	15-100%
	DVSTV-WH	0-10V	120-277V	9-100%
	DVTV-WH	0-10V	120-277V	9-100%

BRAND	MODEL NUMBER	TYPE	INPUT VOLTAGE RANGE	DIMMING RANGE
	VPI06-1LZ	Forward Phase	100-130V	15-100%
	TTI06-1LZ	Forward Phase	100-130V	1-100%
	IPL06	Forward Phase	100-130V	15-100%
_	DZ6HD	Forward Phase	100-130V	17-100%
LEVITON	TBL03	Forward Phase	100-130V	15-100%
Ě	6672	Forward Phase	100-130V	20-100%
	6602	Forward Phase	100-130V	0-100%
_	6674	Forward Phase	100-130V	16-100%
	AWSMT-EAW	Reverse Phase	100-130V	0-100%
	AWSMT-EAW	Reverse Phase	277V	0-100%
	6683	Forward Phase	100-130V	10-100%
	I	I		
9	RHCL453PNICCV6	Forward Phase	100-130V	6-100%
LEGRAND	WSCL450TCCCV4	Forward Phase	100-130V	11-100%
	LSCL453PLACCV4	Forward Phase	100-130V	11-100%
	I			
CRESTON	CLW-DELVEX-P-W-\$	Reverse Phase	100-130V	11-100%
EATON	DF10P-C1	0-10V	120-277V	5-100%

## **DERATING CURVE**

