



DECO DRIVE™

100W 24VDC DRIVER / DIMMER COMBINATION

Fixture Type: _____

Project: _____

Location: _____

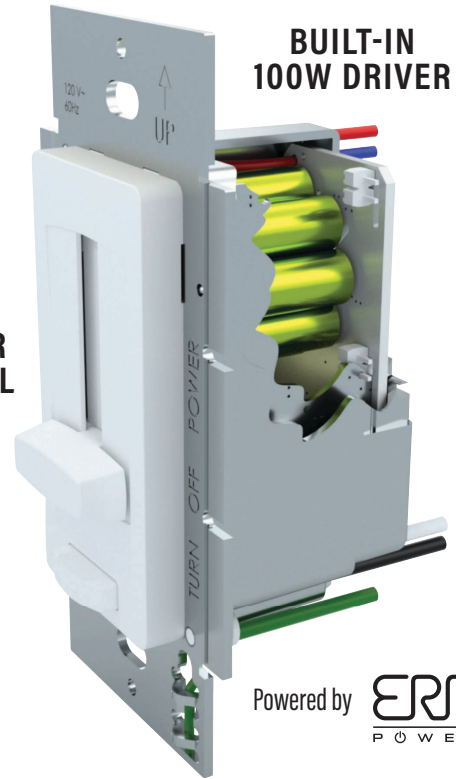
PRODUCT FEATURES

- LED Driver + Dimmer in One Physical Unit
- Fits in a Standard Recessed Electrical Box
- 100%–1% Smooth Dimming
- Single Pole Preset Dimmer with On/Off Push Switch
- Adjustable Voltage Output
- No Derating Required When Ganging Units
- Uses Standard Decora Faceplates (Not Included)
- Compatible with Nearly All Kelvix linear Products*

**Not for use with Color Tuning, RGBW, Dim to Warm, Max, and Vertex*

SPECIFICATIONS

Model	DD10024-WH
Input Voltage	120 VAC
Output Voltage	24VDC / Constant Voltage
Power Output	100 W
Current Output	4 A
Efficiency	Up to 91% Typical
Max Temp.	104°F
Dimming Range	1–100% of Light Output
Startup Time	500 ms Typical
Dimensions W×H×D	2-1/8"×4-1/8"×1-7/16"

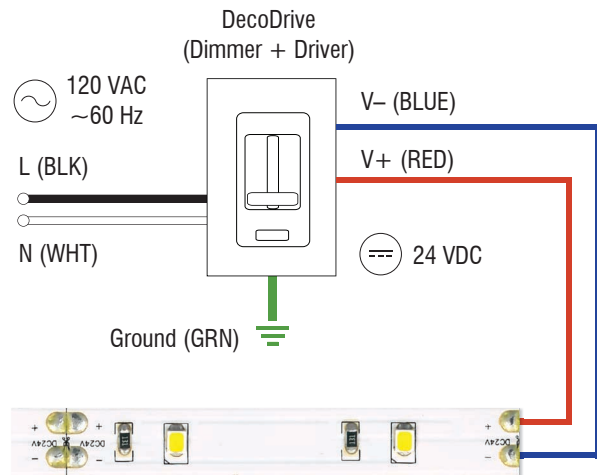


Powered by **ERP**
POWER



Conforms to ANSI/UL Standard 2108
Certified to CAN/CSA Standard C22.2 No. 250.0

SYSTEM DIAGRAM






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SPECIFICATION

INPUT SPECIFICATION (@25°C Ambient Temperature)					
	Units	Minimum	Typical	Maximum	Notes
Input Voltage Range (V_{IN})	VAC	108	120	132	
Input Frequency Range	Hz	47	60	63	
Power Factor (PF)		0.9	> 0.9		At Nominal Input Voltage and Full Rated Load
Inrush Current	Meets NEMA-410 requirements				At Any Nominal Input Full Sine Wave Voltage and Full Rated Load
Leakage Current	μA			500	At Nominal Input Voltage and Measured per IEC 60950-1, Paragraph 5.1
Input Harmonics	Complies with IEC61000-3-2 for Class C				
Total Harmonics Distortion (THD)				20%	<ul style="list-style-type: none"> At Nominal Input Voltage and Full-Rated Load Complies with DLC (DesignLight Consortium) Technical Requirements
Efficiency	%	—	up to 91%	—	At Nominal Input Voltage and Full Rated Load
Isolation	Meets UL60950-1 for Class II Reinforced/Double Insulation Power Supply				
Standby Power	W	—		0.5	With No Load
OUTPUT SPECIFICATION (@25°C Ambient Temperature)					
Output Voltage (V_{OUT})	VDC		12, 24		See Ordering Information for Details
Output Current (I_{OUT})	A	0		4.2 A	
Output Voltage Regulation	%		± 3.0		Includes AC Line Voltage, Load, and Voltage Set Point Variations
Output Voltage Overshoot	%	—	—	20	The Driver Does Not Operate outside of the Regulation Requirements for More Than 200 ms during Power On
Ripple Voltage	$\leq 10\%$ of rated output voltage for each model				<ul style="list-style-type: none"> Measured at Nominal Input Voltage Calculated in Accordance with the IES Lighting Handbook, 9th Edition
Dimming Range	%	1		100	As a % of Light Output
Start-up Time	ms		500		
ENVIRONMENTAL CONDITIONS					
Operating Ambient Temperature (TA)	°C	0		+40	
Storage Temperature	°C	-40		+85	
Humidity	%	8	—	90	Non-Condensing
Cooling	Convection cooled				
Acoustic Noise	dBA			22	Measured at a Distance of 1 Foot (30 cm)
Mechanical Shock Protection	per EN60068-2-27				
Vibration Protection	per EN60068-2-6 & EN60068-2-64				
MTBF	> 200,000 Hours When Operated at Nominal Input Voltage and 75% of Rated Load, and At $T_c \leq 70^\circ C$				
Lifetime	Hours	50,000			At $T_c \leq 70^\circ C$ Maximum Case Hot Spot Temperature



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SPECIFICATION

EMC COMPLIANCE AND SAFETY APPROVALS					
EMC Compliance					
Conducted and Radiated EMI		FCC CFR Title 47 Part 15 Class B at 120 VAC			
Harmonic Current Emissions		IEC61000-3-2	For Class C Equipment		
Voltage Fluctuations & Flicker		IEC61000-3-3			
Immunity Compliance	ESD (Electrostatic Discharge)	IEC61000-4-2	6 kV Contact Discharge, 8 kV Air Discharge, Level 3		
	RF Electromagnetic Field Susceptibility	IEC61000-4-3	3 V/m, 80–1000 MHz, 80% Modulated at a Distance of 3 Meters		
	Electrical Fast Transient	IEC61000-4-4	± 2 kV on AC Power Port for 1 Minute, ± 1 kV on Signal/Control Lines		
	Surge	IEC61000-4-5	± 1 kV Line to Line (Differential Mode) / ± 2 kV Line to Common Mode Ground (Tested to Secondary Ground) on AC Power Port, ± 0.5 kV for Outdoor Cables		
	Conducted RF Disturbances	IEC61000-4-6	3 V, 0.15-80 MHz, 80% Modulated		
	Voltage Dips	IEC61000-4-11	> 95% Dip, 0.5 Period; 30% Dip, 25 Periods; 95% Reduction, 250 Periods		
Transient Protection	Ring Wave		ANSI/IEEE c62.41.1-2002 & c62.41.2-2002 Category A, 2.5 kV Ring Wave		
Safety Agency Approvals					
UL Listed	UL8750, UL2108, UL1598 / CSA 250.0-08				
cUL	CSA 250.13-12				
Safety					
	Units	Minimum	Typical	Maximum	Notes
Hi Pot (High Potential) or Dielectric Voltage-Withstand	VDC	2500			<ul style="list-style-type: none"> Insulation between the Input (AC Line and Neutral) and the Output Tested at the RMS Voltage Equivalent of 1768 VAC

PROTECTION FEATURES

Undervoltage (Brownout)

The DecoDrive series provides protection circuitry such that an application of an input voltage below the minimum stated in *Input Specification* shall not cause damage to the driver.

Short Circuit

The DecoDrive series is protected against short-circuit such that a short from any output to return shall not result in a fire hazard or shock hazard. The driver shall hiccup as a result of a short circuit or over current fault. Removal of the fault will return the driver to within normal operation. The driver shall recover, with no damage, from a short across the output for an indefinite period of time.

Internal Over Temperature Protection

The DecoDrive series incorporates circuitry that prevents internal damage due to an over temperature condition. An over temperature condition may be a result of an excessive ambient temperature or as a result of an internal failure. When the over temperature condition is removed, the driver shall automatically recover.

Output Overvoltage Protection

The output voltage of the DecoDrive series is limited to 1.3 times the maximum output voltage of each model.

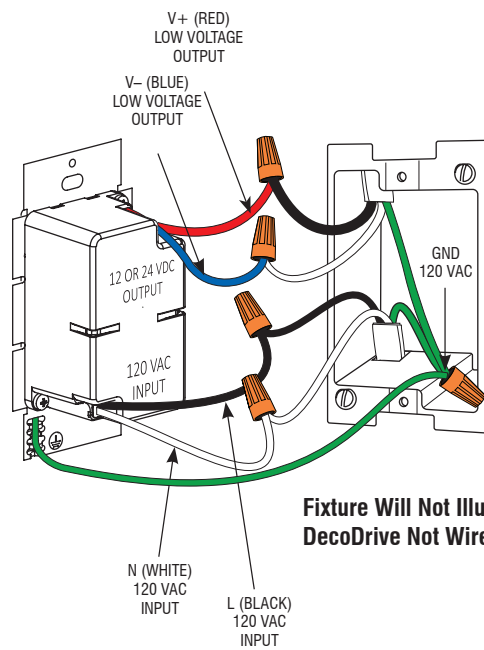
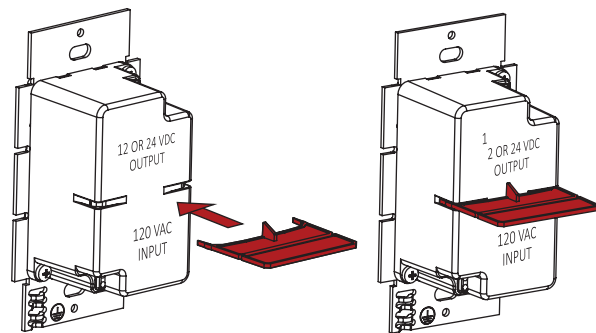
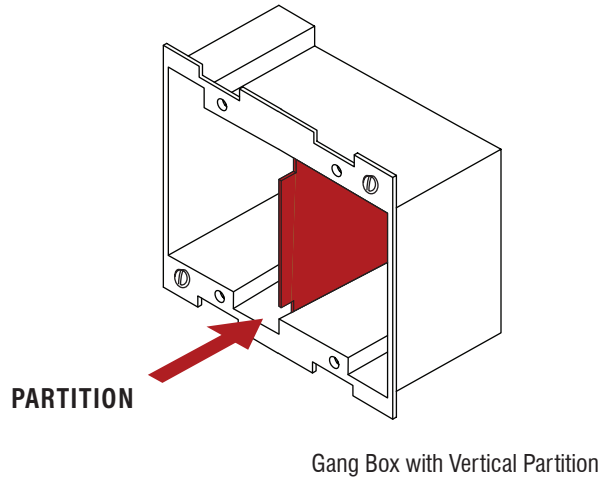


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SPECIAL WIRING INSTRUCTIONS



Fixture Will Not Illuminate If
DecoDrive Not Wired as Shown

