
SPECIFICATION

HPJ Series

5 in 1 Dimming LED DRIVER

MODEL NO.: KS-96AW-XX#

DESIGN NO.: KS96W

VERSION NO.: 001



■ Features

- Universal AC input voltage 100-277VAC
- Efficiency up to 90%
- High power factor, $PF \geq 0.95$
- Single channel & constant voltage mode and PWM style output
- Protection: OCP, OVP, SCP, OTP
- Limited Power Source
- UL/cUL, RoHS, CE, ENEC, GS, Class P, Type HL Approved
- 5 in 1 dimming:(0-10V,1-10V,TRIAC,PWM,resistance)
- Compatible with Forward phase, Reverse phase, Triac, MLV, ELV Dimmers
- Flicker free
- Typical lifetime > 50000 hours
- 5 years warranty
- IP65 IP67 Rated Enclosure for Indoor and Outdoor Use

96W 5 in 1 dimming LED DRIVER

24VDC



CLASS P CLASS 2 RoHS

Description

KS-96AW HPJ Series is one 96W LED variable AC-DC driver, with constant voltage output design as the main characteristics. This HPJ series model can work at input voltage 100~277 VAC, and provide a variety of rated output voltage between 12V, 24V, 36V, 48V. It is created for many lighting applications including advertising sign, led light-box. The high efficiency of the driver and compact metal case enables them to run cooler, significantly improving reliability and extending product life. To ensure trouble-free operation, protection is provided against input surge, over current, output over voltage, short circuit, and over temperature.

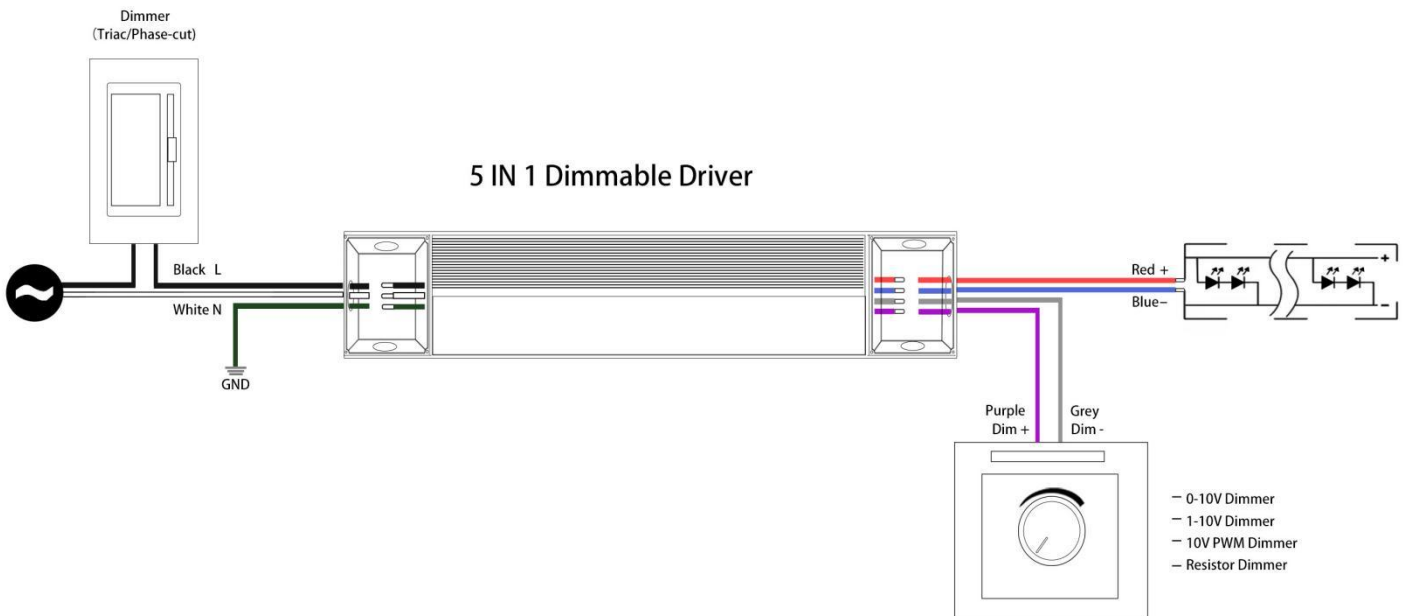
Warning

The dimming product is only suitable for direct drive LEDs. In the dimming state, the dim+ dim- ports are PWM output. If there is a circuit drive LED or load with capacitance inside the LED, it is not suitable for this dimming power supply.

■ Specification

MODEL		<input type="checkbox"/> KS-96AW-12#	<input checked="" type="checkbox"/> KS-96AW-24#	<input type="checkbox"/> KS-96AW-36#	<input type="checkbox"/> KS-96AW-48#	
OUTPUT	Output Voltage	12V	24V	36V	48V	
	Rated current	8A	4A	2.66A	2A	
	Rated power	96W	96W	96W	96W	
	Ripple & Noise (max.)	200mVp-p	250mVp-p	250mVp-p	250mVp-p	
	Voltage accuracy	±2.0%	±2.0%	±2.0%	±2.0%	
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	
	Load adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	
	Start, rise time	500ms, 100ms/230VAC, 1000ms, 100ms/115VAC				
	Hold time	10ms/115VAC, 230VAC				
INPUT	Voltage range	100 ~ 277VAC				
	Frequency range	47 ~ 63Hz				
	Power factor	PF≥0.98/115VAC, PF≥0.95/230VAC, PF≥0.9/277VAC, Full load				
	Total harmonic distortion	THD< 20% (@ load ≥50%/115VAC,230VAC; @ load ≥75%/277VAC)				
	Efficiency	Vin: 115VAC	≥86.81%	≥90.5%	≥91%	≥91.5%
		Vin: 230VAC	≥89.18%	≥92.68%	≥93.18%	≥93.68%
	AC current	1.06A				
	Inrush current	Cold start 75A(width=350us measured at 50% I peak)/230Vac				
	Leakage current	< 1 m A				
No load/ standby power consumption	< 3.4W					
Protection	Over current	95 ~ 110%				
		95 ~ 110% Constant current limit, load abnormal condition can be removed after automatic recovery				
	Short circuit	Burp mode, load abnormal conditions can be removed after automatic recovery				
	Over voltage	13 ~ 16 V	26 ~ 32 V	39 ~ 47 V	52 ~ 63V	
		Turn off the output voltage, restart and resume				
Over temperature	Turn off the output voltage, restart and resume					
Environment	Working Temp	T case=-40 ~ +50°C				
	Max.Case Temp	T case=+90°C				
	Working Humidity	20 ~ 95% RH, non-condensing				
	Storage Temp.,Humidity	-40 ~ +90°C, 10 ~ 95% RH				
	Temp.Coefficient	±0.03%/°C (0 ~60°C)				
	Vibration	10~500Hz, 5G 12min./1 cycle, period for 72 min. each along X,Y,Z axes				
Safety & EMC	Safety standards:UL8750+UL1310					
	Withstand voltage:I/P-O/P:1.88KVac					
	Isolation resistance:I/P-O/P:100MΩ/500VDC/25°C/70%RH					
	EMC EMISSION:Confirms to FCC					

■ Dimming Connect Drawing

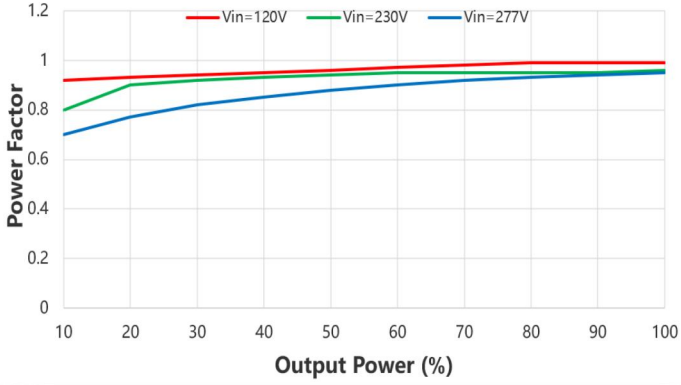


Warning:

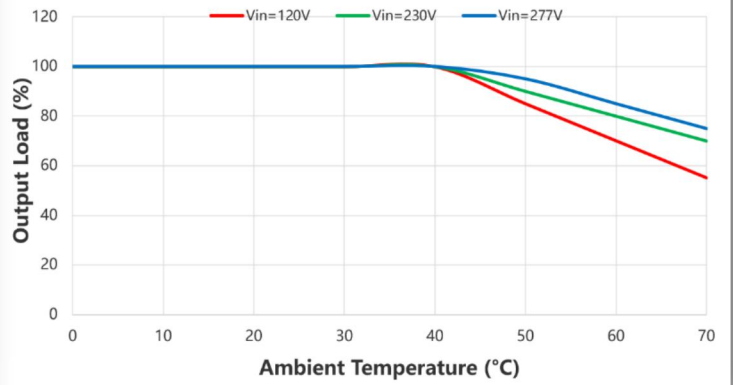
- ※ This driver should be installed by qualified and professional person;
- ※ Suitable for indoor use without direct sunlight exposure; Good ventilation are need;
- ※ Ensure that wiring is correct before test in order to avoid light damage;
- ※ If driver cannot work normally, don't maintain privately; Have any questions, please contact "Keysun".

■ Dimming Curve

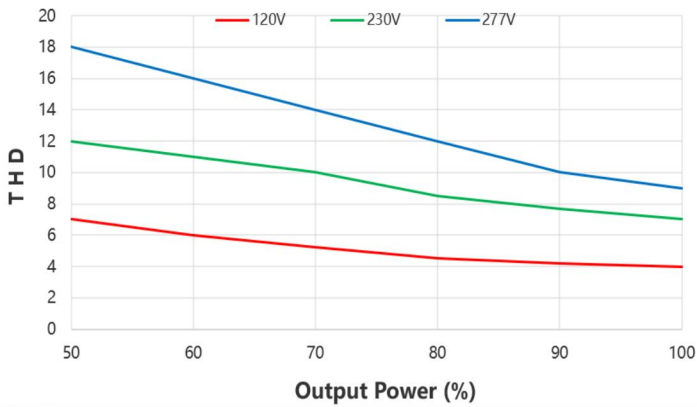
Power Factor - Output Power Curve



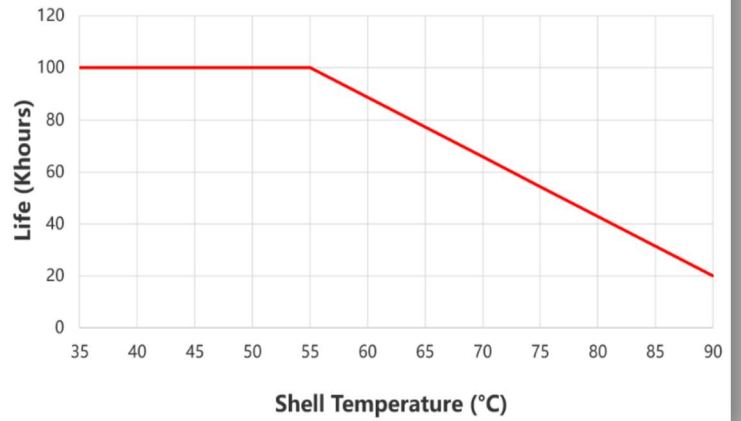
Output Load - Ambient Temperature Curve



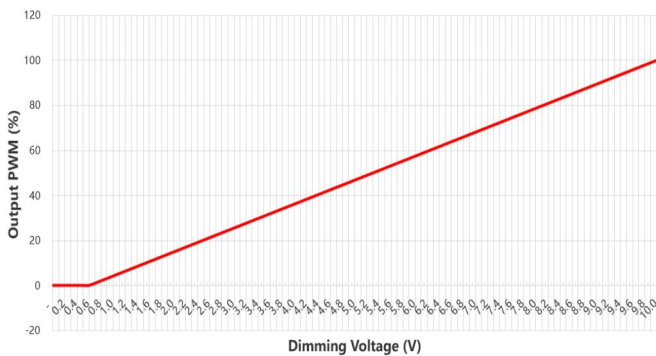
THD - Output Power Curve



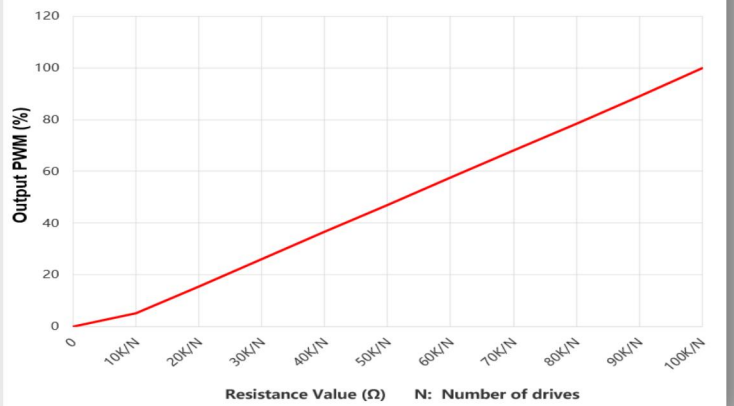
Life - Shell Temperature Curve



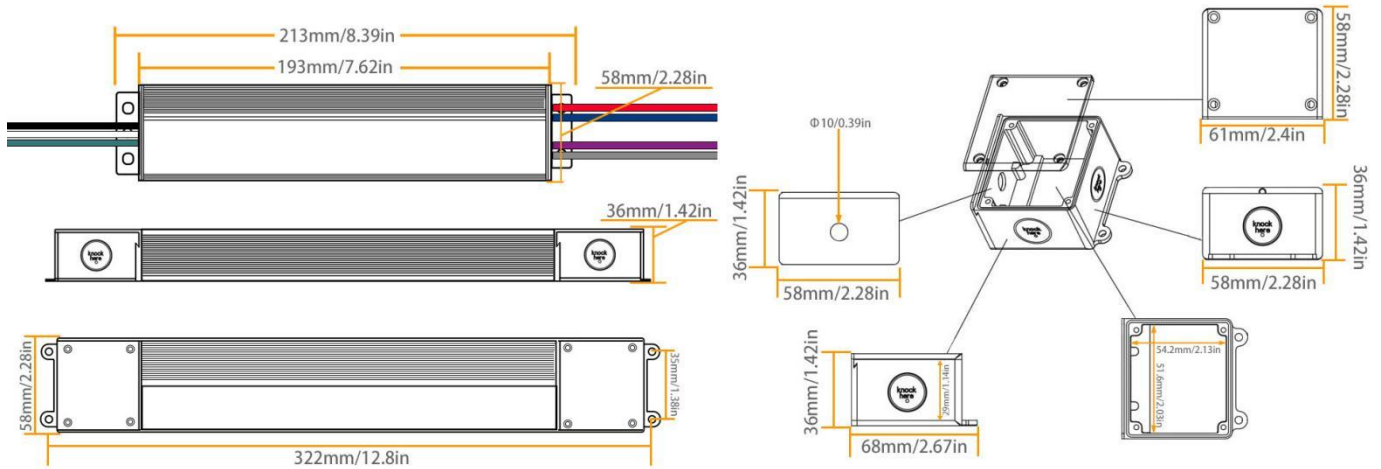
0-10V Dimming Curve



Resistance Dimming Curve



■ Mechanical Specification & Label



KSPower

INPUT

- AC L (BLACK)
- AC N (WHITE)
- ⊕ (GREEN / YELLOW)

Class 2 LED Driver (5 In 1 Dimming)

for Triac/Phase-cut, 0-10V, 1-10V, Resistance, 10V PWM Dimmers
Constant Voltage

MODEL: KS-96AW-24P

INPUT: 100-277V~, 1.26A max, 50/60Hz, PF≥0.95

OUTPUT: 24V= 4.0A, 96W

Manufacturer: Shenzhen Keysun Technology Limited



Class P TYPE HL RoHS SELV

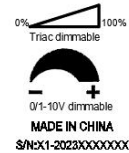
CONFORMS UL cUL 8750 CONFORMS FCC
CONFORMS CAN/CSA-C22.2 NO.250.13

WARNING-Risk of Fire or Electric Shock

Do not interconnect output terminations

SUITABLE FOR DRY, DAMP AND WET LOCATIONS

For Connections Use Wire Rated for at Least 90°C (194°F)



OUTPUT

- (RED) Vo + ●
- (BLUE) Vo - ●
- (GRAY) DIM - ●
- (PURPLE) DIM + ●

■ Package Information

Brown box: 339*65*41mm; Carton: 360*356*190mm; Quantity: 20pcs/carton; G.W:18kgs/Carton.

Note:

AC Input Cord	UL SJTW #18AWG 3*0.82mm ² , ØD: 7.8mm ;Green: Ground, Black: L, White: N
DC Output Cord	UL SJTW #18AWG 2*0.82mm ² , ØD: 7.35mm; Red: V+, Blue: V-
Signal Cord	UL SJTW #18AWG 2*0.82mm ² ; Gray Dim-, Purple Dim+