

Features:

- Integrated DALI/Push/0-10V/1-10V/PWM/R DIM standard dimming interface
- DAL2 certification, DALI member
- Digital control output, flicker free
- International general AC input 100-250V rang
- Protection type: short circuit / over current / over voltage
- $\bullet \ \mathsf{Natural} \ \mathsf{air} \ \mathsf{cooling}, \ \mathsf{moisture\text{-}proof}, \mathsf{Thermal} \ \mathsf{silicone} \ \mathsf{heat} \ \mathsf{dissipation} \ \mathsf{process}$
- Suitable for LED home and business intelligent lighting applications
- Output fast pressure terminal, safe and convenient
- Comply with world lighting safety code
- Protection class II
- 5-year warranty























 $\eta > 0.85$







General description:

DALI Dimming LED Driver is one of the constant current dimming LED driver developed by my company with high power factor, high efficiency, high precision, the use of the efficient stable low loss switch control chip and the high performance components makes it with low noise, long life and other characteristics.

PE-N30DA/PE-N45DA have DALI/Push/0-10V/ 1-10V/PWM/R DIM six dimming ways ,Dali is the main default, 6 kinds of dimming mode switching, no interference with each other

Dimming interface: 1.DALI dimming, use standard DALI signal interface. can match with all DALI control system in the marker.

DALI full name: Digital Addressable Lighting Interface

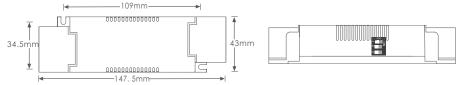
2.0-10V dimming, use the standard 0-10V /100K resistance/10V PWM dimming.

3. Push dimming mode is shared with Dali interface, and one of them can be selected.

Specification:

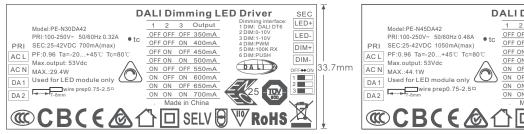
OUTPUT Str Dir	Output Voltage Itax Output Voltage Itan Output Voltage Output Current Output Power Itrobe Level Inimming Range	9-42Vdc 42Vdc 55Vdc 350/400/450/500/550/600/650/700mA 3. 1W~29. 4W	9-42Vdc 42Vdc 55Vdc 700/750/800/850/900/950/1000/1050mA						
OUTPUT Str.	on-load Output Voltage Output Current Output Power trobe Level imming Range	55Vdc 350/400/450/500/550/600/650/700mA 3. 1W~29. 4W	55Vdc 700/750/800/850/900/950/1000/1050mA						
OUTPUT Output Str.	Output Current Output Power trobe Level imming Range	350/400/450/500/550/600/650/700mA 3. 1W~29. 4W	700/750/800/850/900/950/1000/1050mA						
OUTPUT Str.	Output Power trobe Level imming Range	3. 1W~29. 4W							
OUTPUT Str Dir	trobe Level imming Range								
Dir	imming Range	No Flicker	6. 3W~44. 1W						
I —		No Flicker							
PV		0~100%, LEDstart at 0.03%possible.							
ı ⊢	WM Dimming Frequency	>3600Hz							
	Current Accuracy	±3%							
Rip	ipple & Noise	Power down memory function							
Dir	imming Interface	DALI (IEC62386), Push /0-10V/1-10V/PWM/100KR DIM Signal control current < 0.1 mA							
Inp	nput Voltage Range	100-250Vac							
Fre	requency	50/60Hz							
Int	nput Current	<0.32A ac110v	<0.48A ac110v						
	ower Factor	PF>0.99/100Vac, at full load	PF>0.99/100Vac, at full load						
INPUT TH	HD	230Vac@THD ≤10% (full load)							
Eff	fficiency(typ.)	85. 5%	87%						
Inr	nrush Current(typ.)	Cold start 20A@230Vac	Cold start 20A@230Vac						
Ar	nti Surge	L-N: 2kV							
Le	eakage Current	<0.25mA/230Vac ac(50% lpeak test twidth=58.4us)							
Wo	Vorking Temperature	ta: 45°C tc: 80°C							
W	Vorking Humidity	20 ~ 95%RH, non-condensing							
ENVIRONMENT Sto	torage Temp., Humidity	-40 ~ 80°C, 10~95%RH							
Te	emp. Coefficient	±0.03%/°C(0-50) °C							
Vil	ibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.							
0,	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, , auto recovers.							
0\	Over Load Protection	Shut down the output when rated power≥102%, auto recovers.							
PROTECTION	hort Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.							
No	Ion-load Protection	output Constant Voltage.							
Wi	Vithstand Voltage	I/P-O/P: 3750Vac							
Isc	olation Resistance	I/P-O/P: 100M Ω /500VDC/25°C/70%RH							
SAFETY & Sa	afety Standards	IEC/EN61347-1, IEC/EN61347-2-13							
EMC EM	MC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3							
EΛ	MC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547							
I —	trobe Test Standard	IEEE 1789							
	vimension	147.5(117)×43×30mm(L×W×H)							
	acking	PE plastic bag packing							
	Veight(G.W.)	187g/245g±10g							

Dimensions:





Product Label:





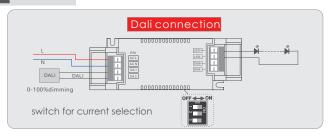
LED Current Selection:

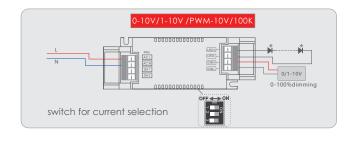
DIP switch for 8 optional currents' quick selection (see the table below).

Model	DIP switch	N N N N N N N N N N N N N N N N N N N	ON S	2 0 2 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		N N N N N N N N N N N N N N N N N N N	~	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2	
PE-N30DA42	output current	350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA	OFF ←→ ON
	output voltage	9-42V	9-42V	9-42V	9-42V	9-42V	9-42V	9-42V	9-42V	
	output power	3. 1W-14. 7W	3. 6W-16. 8W	4W-18. 9W	4. 5W-21W	4. 9W-23. 1W	5. 4W-25. 2W	5. 8W-27. 3W	6. 3W-29. 4W	
	output current	700mA	750mA	800mA	850mA	900mA	950mA	1000mA	1050mA	
PE-N45DA42	output voltage	9-42V	9-42V	9-42V	9-42V	9-42V	9-42V	9-42V	9-42V	
	output power	6. 3W-29. 4W	6. 7W-31. 5W	7. 2W-33. 6W	7. 6W-35. 7W	8. 1W-137. 8W	8. 5W-40W	9W-42W	9. 5W-44. 1W	

- * After current setting by DIP switch, power off and then power on to make the new current effective.
- * E.g. LED 3.2V/pcs: 9-24V can power 3-7pcs LEDs in series, 9-42V can power 3-12pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

Connection:





Push Dimming:



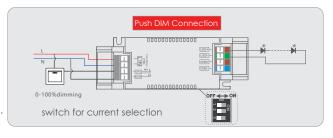
On/off control: Short press.

Stepless dimming: Long press.

With every other long press, the light level goes

to the opposite direction.

Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.



Wiring:

 1.DALI interface Dali is a digital addressable lighting interface, which is directly connected with Dali control system, and the signal line is not divided into positive and negative poles.

AC voltage is connected to Dali two ports through a switch with automatic reset to realize key dimming. 2.PUSH interface: Single press switch function, long press dimming.

* 3.0-10V interface: 0-10V dimmer interface, 100k resistance dimmer without positive and negative, 0 / 1-10V dimmer with

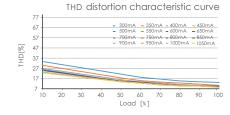
positive and negative

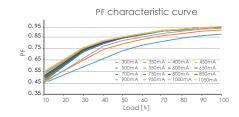
¾ 4.Do not connect voltage higher than 10V at 0-10V interface

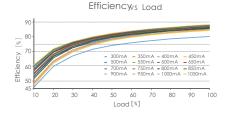
★ 5.The input terminal: wire gauge 22AWG-14AWG (0.5mm2 − 1.5mm2) wire stripping requirement:9-10mm

¾ 6.The output terminal: wire gauge 22AWG-12AWG (0.5mm2 − 1.5mm2)wire stripping requirement :6-7mm.

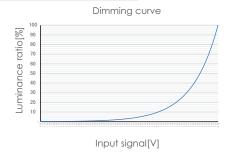
Relationship Diagrams:

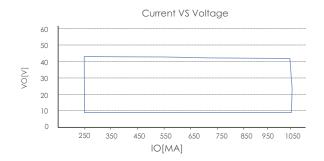






Relationship Diagrams:





The use of guidance:

Unless otherwise specified, all specifications and parameters are measured at 230VAC input, rated load and 25 $^{\circ}$ C Ambient Temperature

This product has a press line cap at the input, with self-locking clamping, it can be opened up with a screwdriver, then you will see the input terminal connected with the AC line L and the null lime N, The output terminal connect a according to the product label, notice the positive and negative pole.

- **1:please pay attention to the distinction between input and out put, connect correctly, then power on
- **2:please connect first the load of the DC output, open the driver after checking; in the constant current mode, if power on at open circuit, please turn off the driver and can't connect the LED until the electric energy stored by the output release, or it may damage the LED;
- **3. this type of driver is only limited to the use of the LED lamps, the input voltage range is AC100-250V, the heat insulation cotton and other items that obstruct the heat dissipation of the product, which conforms to the product under the specified output voltage, current range, the use environment temperature is -20-45 degrees, and the surface can not cover the conditions of the environment, this product enjoys three years of free warranty.
- 1.the LED lamp doesn't bright after the dimming driver is connected at the first time, please turn off the AC input and check as follow:
- 1) whether or not DC output bad contact;
- 2) whether DC output polarity is reversed, or the LED board is welded anti;
- 3) whether AC input is bad contact, test after eliminating these failures;
- 2.the device has good connection, LED lights, but the LED flicker, please turn off the AC input and check as follow:
- 1). whether or not the parameters and actual parameters match.
- 2) please timely communicate with us if you have any questions in the using, we will try our best to solve the problems with you.

Statement:

The pictures and specifications is for reference only, in kind prevail, specifications are subject to change with further notice.

The abnormal conditions and the corresponding treatment methods:

Digital Addressable lighting Interface (DALI)

DALI slave unit will send data only master unit requests, that is, adopt command answering mode

There are 64 slave units at most in the same DALI network, each unit has a separate address(short address), A salve unit can also be assigned to a certain group, and a slave unit can belong to different group, salve unit can exist up to 16 groups at the same time, each unit can set 16 scenarios.

The main features of the DALI protocol

- 1) Asynchronous serial communication.
- 2)1200 baud rate, using the Manchester encoding format.
- 3)Two lies differential signal.
- 4) The high level when differential voltage is larger than 9.5V.
- 5) The low level when differential voltage is less than 6.5 V.
- 6)The master unit controls communication process.
- 7)One DALI bus can connect with 64 slave units.
- 8) Each slave unit can be individually addressed.

DALI Electrical Specification

Under the idle state, from machine unit method to control the bus:

- 1) High Output power at ordinary time, not to interference in the hold signal.
- 2)Output low electricity at ordinary time, directly to the DALI bus short circuit to each other.
- 3) DALI bus maximum current of 250mA
- 4) Not a two-way communication at the same time.
- 5) Transmission cable up to 300 meters, or pressure drop is no more than 2v