

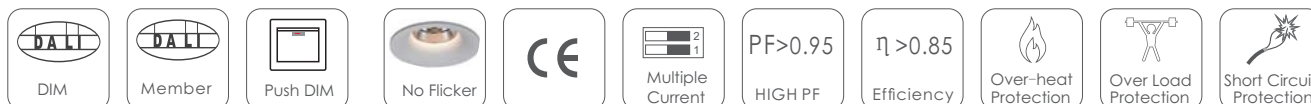
PE14DA 14.7W

PE20DA 21W

**Features:**

- Standard DALI dimming interface
- With PUSH function to realize PUSH dimming
- Output flicker free
- International universal AC input voltage (100V to 265VAC)
- Protections: short circuit/over voltage/over current
- Natural cold wind
- Big terminal locked by screw
- Suitable for LED home lighting and commercial lighting
- Safe no load protection device
- Economic and convenient installation
- Conform to the world lighting equipment safety standards
- Protection class II
- Five years warranty

5 years    **RoHS SELV CE Class 2**

**General description:**

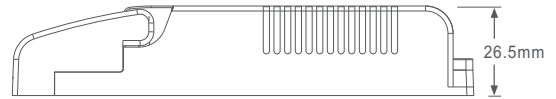
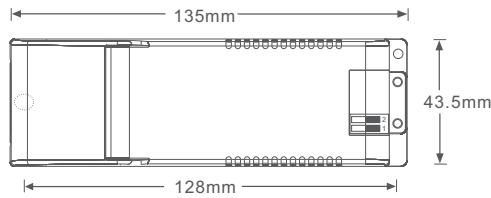
DALI Dimming LED Driver is one of the constant current dimming LED driver developed by my company with high power factor, high efficiency, high precision, the use of the efficient stable low loss switch control chip and the high performance components makes it with low noise, energy saving, environmental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

DALI Dimming LED Driver use standard DALI signal interface, can match with all DALI control system in the market.
DALI full name: Digital Addressable Lighting Interface

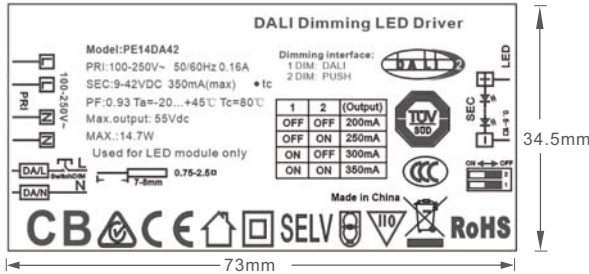
Specification:

Model		PE14DA24	PE14DA42	PE20DA24	PE20DA42
OUTPUT	Output Voltage	9-24Vdc	9-42Vdc	9-24Vdc	9-42Vdc
	Max Output Voltage	30Vdc	50Vdc	30Vdc	50Vdc
	Non-load Output Voltage	0Vdc	0Vdc	0Vdc	0Vdc
	Output Current	350/400/450/500mA	200/250/300/350mA	650/700/750/800mA	350/400/450/500mA
	Output Power	2.7W~12W	1.8W~14.7W	5.85W~19.2W	3.15W~21W
	Strobe Level	No Flicker			
	Dimming Range	0~100%, LEDstart at 0.03%possible.			
	PWM Dimming Frequency	≤3600Hz			
	Current Accuracy	±3%			
Ripple & Noise	≤2V (No dimming)				
INPUT	Dimming Interface	DALI (IEC62386), Push DIM			
	Input Voltage Range	100-250Vac			
	Frequency	50/60Hz			
	Input Current	<0.13A	<0.16A	<0.27A	<0.27A
	Power Factor	PF>0.95/100Vac, at full load	PF>0.95/100Vac, at full load	PF>0.95/100Vac, at full load	PF>0.95/100Vac, at full load
	THD	230Vac@THD ≤15% (full load)			
	Efficiency(typ.)	80.5%	83%	83%	85%
	Inrush Current(typ.)	Cold start 1.78A@230Vac	Cold start 2.34A@230Vac	Cold start 2.43A@230Vac	Cold start 2.43A@230Vac
	Anti Surge	L-N: 2kV			
Leakage Current	<0.25mA/230Vac				
ENVIRONMENT	Working Temperature	ta: 45°C tc: 80°C			
	Working Humidity	20 ~ 95%RH, non-condensing			
	Storage Temp., Humidity	-40 ~ 80 °C 10~95%RH			
	Temp. Coefficient	±0.03%/°C(0-50) °C			
	Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.			
PROTECTION	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, , auto recovers.			
	Over Load Protection	Shut down the output when rated power ≥102%, auto recovers.			
	Short Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.			
	Non-load Protection	Output Constant Voltage.			
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac			
	Isolation Resistance	I/P-O/P: 100MΩ /500VDC/25°C/70%RH			
	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13			
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3			
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547			
Strobe Test Standard	IEEE 1789				
OTHERS	Dimension	135×43.5×26.5mm(L×W×H)			
	Packing	PE bag			
	Weight(G.W.)	120g±10g			

Dimensions :



Product Label:



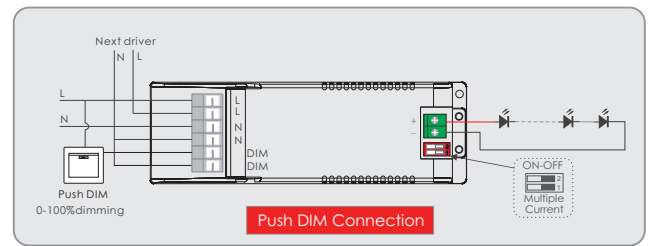
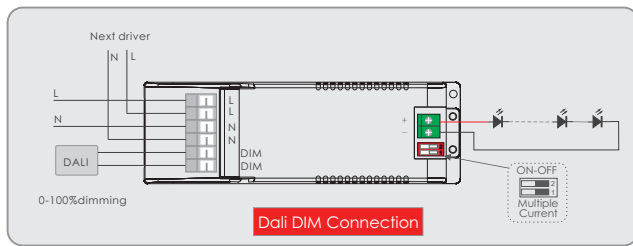
LED Current Selection:

DIP switch for 4 optional currents' quick selection(see the table below).

Model	DIP Switch	Current Selection				Output Voltage	Output Power
		350mA	400mA	450mA	500mA		
PE14DA24	Output Current	350mA	400mA	450mA	500mA	9-24V	3.15W-8.5W, 3.6W-9.6W, 4.05W-10.8W, 4.5W-12W
	Output Voltage	9-24V	9-24V	9-24V	9-24V		
	Output Power	3.15W-8.5W	3.6W-9.6W	4.05W-10.8W	4.5W-12W		
PE14DA42	Output Current	200mA	250mA	300mA	350mA	9-42V	1.8W-8.4W, 2.25W-10.5W, 2.7W-12.6W, 3.15W-14.7W
	Output Voltage	9-42V	9-42V	9-42V	9-42V		
	Output Power	1.8W-8.4W	2.25W-10.5W	2.7W-12.6W	3.15W-14.7W		
PE20DA24	Output Current	650mA	700mA	750mA	800mA	9-24V	5.85W-15.6W, 6.3W-16.8W, 6.75W-18W, 7.2W-19.2W
	Output Voltage	9-24V	9-24V	9-24V	9-24V		
	Output Power	5.85W-15.6W	6.3W-16.8W	6.75W-18W	7.2W-19.2W		
PE20DA42	Output Current	350mA	400mA	450mA	500mA	9-42V	3.15W-14.7W, 3.6W-16.8W, 4.05W-18.9W, 4.5W-21W
	Output Voltage	9-42V	9-42V	9-42V	9-42V		
	Output Power	3.15W-14.7W	3.6W-16.8W	4.05W-18.9W	4.5W-21W		

- * 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.

Wiring Diagram:



Push Dimming:

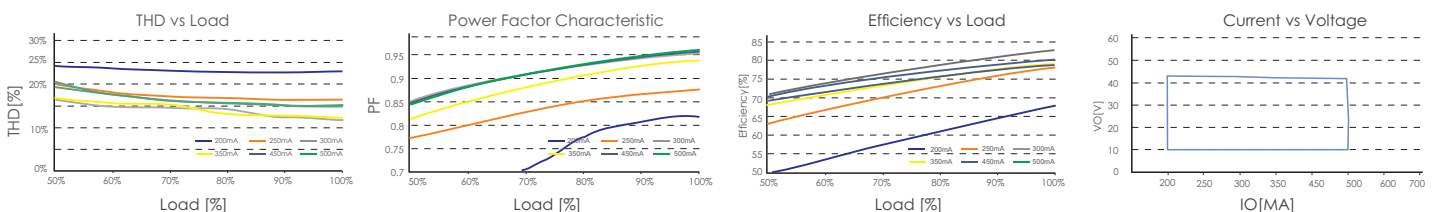


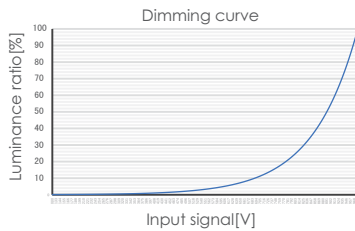
On/off control: Short press.
 Stepless dimming: Long press.
 With every other long press, the light level goes to the opposite direction.
 Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

Wiring:

The input terminal: wire gauge 22AWG-14AWG (0.315mm² – 2.06mm²) wire stripping requirement:9-10mm
 The output terminal: wire gauge 22AWG-12AWG (0.315mm² – 3.15mm²) wire stripping requirement :6-7mm.

Relationship Diagrams:





The use of guidance:

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 line N. The output terminal connect according to the product label, notice positive and negative pole.

Note:
 ** 1: please pay attention to the distinction between input and output, connect correctly, then power on
 ** 2: please connect first the load of the DC output, open the power supply after checking; in the constant current mode, if power on at open circuit, please turn off the power supply 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 power supply is only limited to the use of LED lamps and lanterns, the input voltage range is AC 100-265V, the output voltage range is DC9-42V, the use range of the output current is 350mA±5%, the use environment temperature is -20 to +45 degrees, and the surface can not cover the heat insulation cotton and other items that obstruct the heat dissipation of the product, which conforms to the product Under the conditions of the environment, this product enjoys three years of free warranty.

The abnormal conditions and the corresponding treatment methods:

- 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:
 - a) Whether or not DC output bad contact;
 - b) Whether DC output polarity is reversed, or the LED board is welded anti;
 - c) 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, then check the DC output:
 - a) overload, under load.
 - b) Whether or not the parameters and actual parameters match.
- 3, please timely communicate with us if you 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.

Appendix:

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 slave unit can also be assigned to a certain group, and a slave unit can belong to different group, slave unit can exist up to 16 groups at the same time. Each unit can set 16 scenarios

The main features of the DALI protocol

- a) Asynchronous serial communication
- b) 1200 Baud rate, using the Manchester encoding format
- c) Two lines differential signal.
- d) The high level when differential voltage is larger than 9.5v.
- e) The low level when differential voltage is less than 6.5v.
- f) The master unit controls communication process.
- g) One DALI bus can connect with 64 slave units.
- h) Each slave unit can be individually addressed.

DALI Electrical specification

DALI bus is high level in idle state.

The method that the slave unit control the bus :