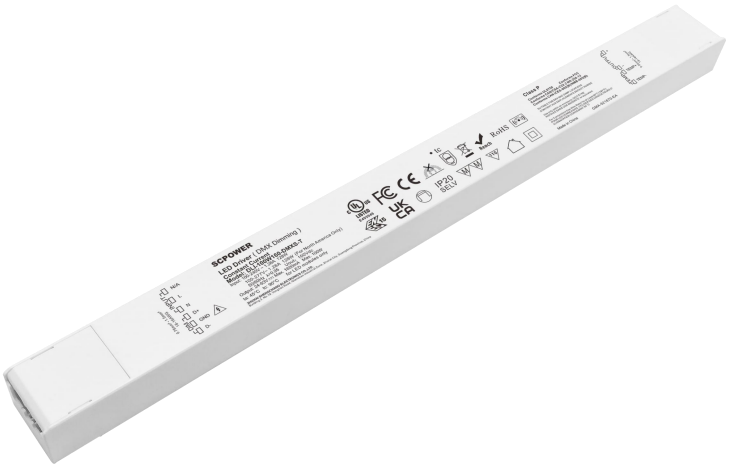
DLI-DMXS Series 100W

Whole Family: DLI-100Wxxx-DMXz-T (z=S/L/F) (xxx=160=1600mA /210=2100mA) [20W 40W 60W 100W]

c UL us LISTED E495946 · FC · CE · UKCA · ENEC 15 · ICES-005 · SAA · Class P · IP20 SELV · RoHS · Reach · NFC



Features

Output:	Constant Current
Input voltage range:	100-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 90.5%
Protections:	Open circuit/short circuit/over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	IP20(EU); for dry and damp locations(US)
Design features:	DMX signal-end isolation, Driver parameters can be adjusted by NFC APP.
Dimming function:	DMX dimming, RDM dimming, flicker free
Application:	Suitable for the application of LED lighting
Dimming range:	(0.5%-1%) -100% (under the maximum current state)
Warranty:	5 years warranty
Others:	High efficiency, small size, high power factor, low THD

Specification

Model		DLI-100W160-DMXS-T	DLI-100W210-DMXS-T
Certificate		UL/FCC/CE/UKCA/ENEC/ICES-005/SAA/Class P/SELV/ROHS/Reach	
Output	Rated current	160mA-1600mA	210mA-2100mA
	DC Voltage	24V-93V	12V-54V
	Rated power	100W(Max)	
	Voltage Tolerance	±30mA	
	No-load voltage(Max.)	98V(Max)	
	Line Regulation	<0.1%	
	Load Regulation	<0.1%	
Input	Voltage Range	100-277VAC	
	Frequency Range	50 / 60Hz	
	Power Factor @ full load	>0.95	
	THD(Typ.) @ full load	<10%	
	Efficiency @ full load	>88.5%@120VAC 60Hz >90.5%@230VAC 50HZ >90.5%@277VAC 60HZ	
	No load power (Max)	<3W	
	Standby power (max.)	<0.5W	
	AC Current (Max.)	1.28A	
	Inrush Current (Typ.)	29.6A, 412us@50%Ipeak120V 56.8A, 120us@50%Ipeak230V 68.4A, 580us@50%Ipeak277V	
	Leakage current	<0.5mA	
Protection	Short Circuit	Hiccup mode, restarts automatically after fault condition is removed	
	Over Load	105%~120% Hiccup mode or Constant power mode, recovers automatically after fault condition is removed	
	Over temperature	Ambient temp. over 55 ± 5℃, output current will be reduced to 50%; Ambient temp.Over 45 ± 5℃, recovers automatically after temp. drops. Ambient temp.over 75 ± 5℃, output current will be reduced to 0%; Ambient temp.Over 45 ± 5℃, recovers automatically after temp. drops.	
Environment	Working TEMP. (Ta)	-40~+60℃ (see below derating curve)	
	Case Temperature (Tc)	90℃	
	Working Humidity	20 -90%RH non-condensing	
	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH	
	TEMP.coefficient	±0.03%/℃(0 - 50℃)	
	Vibration	10~500Hz, 2G 12min./1 cycle, period for 72min. each along X,Y,Z axes	
Safety & EMC	Safety standards	EN61347-1; EN61347-2-13 UL8750; CAN/CSA-C22.2 No.250.13	
	Withstand voltage	I/P-O/P:3.75KVAC (EU) I/P-O/P:1.88KVAC (US)	
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25℃ / 70%RH	
	EMC Immunity	EN61547; EN61000-4-2,3,4,5,6,11 FCC/ICES do not request this test.	

	EMC Emission	EN55015; EN61000-3-2,3 CFR47 FCC Part 15 Subpart B:2020; ICES-005 Issue 5; ANSI C63.4a-2017
	Surge Immunity Test	AC Power Line:Differential Mode 2 kV
	Strobe test standard	IEEE 1789 flicker-free
Others	Net Weight	0.43KG
	Dimension	375.8*34.8*24.1mm (L*W*H)
	Packing	390*270*195mm 50pcs /CTN
Notes	1. All parameters NOT specially mentioned are measured at rated load and 25℃of ambient temperature. 2. To extend the driver's using life, please reduce the loading at lower input voltage. 3. LED driver Meets the harmonic emissions requirements of ANSI C82.77-10. 4. Dimming electrical circuit: Notice: This control circuit is isolated,but didn't evaluate Class 2. Please refer to the installation manual to connect the dimmer. **CAUTION:** More than one power supply present. **ATTENTION:** presence de plusieurs alimentations électriques.	

MCB recommendation

When the input voltage is 120Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCB Type	Level	The number of LED Driver
C type(breaking capacity:6KA)	10A	7
	13A	9
	16A	11
	20A	14
		18
When the input voltage is 230Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCB Type	Level	The number of LED Driver
C type(breaking capacity:6KA)	10A	14
	13A	18
	16A	22
	20A	28
	25A	35
When the input voltage is 277Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCB Type	Level	The number of LED Driver
C type(breaking capacity:6KA)	10A	17
	13A	22
	16A	27
	20A	34
	25A	42

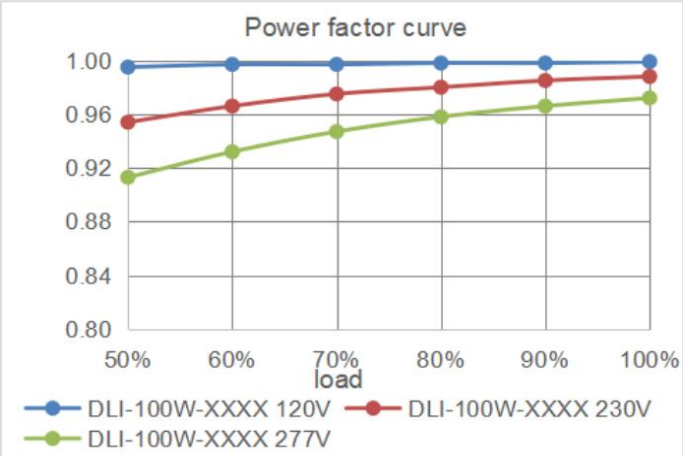
Note:

1. The above quantities of the led drivers connected on the Type C is recommended base on the maximum ambient temperature is 50°C
2. The breaker should be selected according to the input rated voltage, input rated current, ambient temperature, and trip characteristic curve

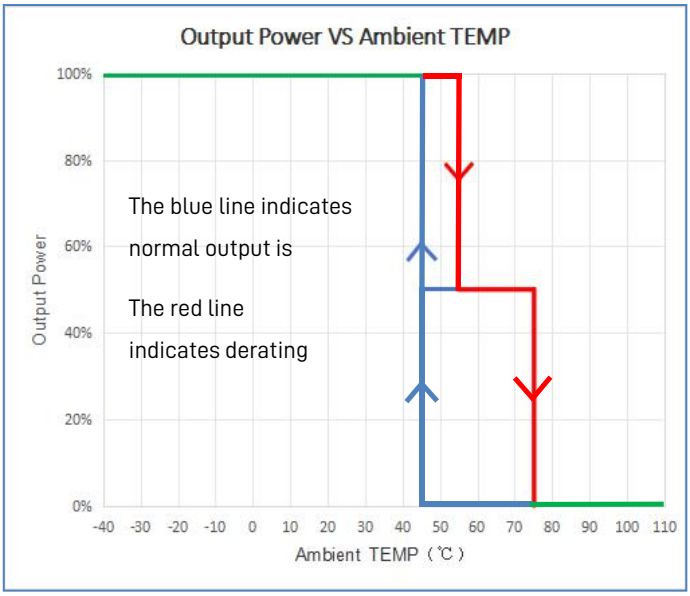
Efficiency Curve (efficiency vs output load)



Power factor curve(Power factor vs output load)

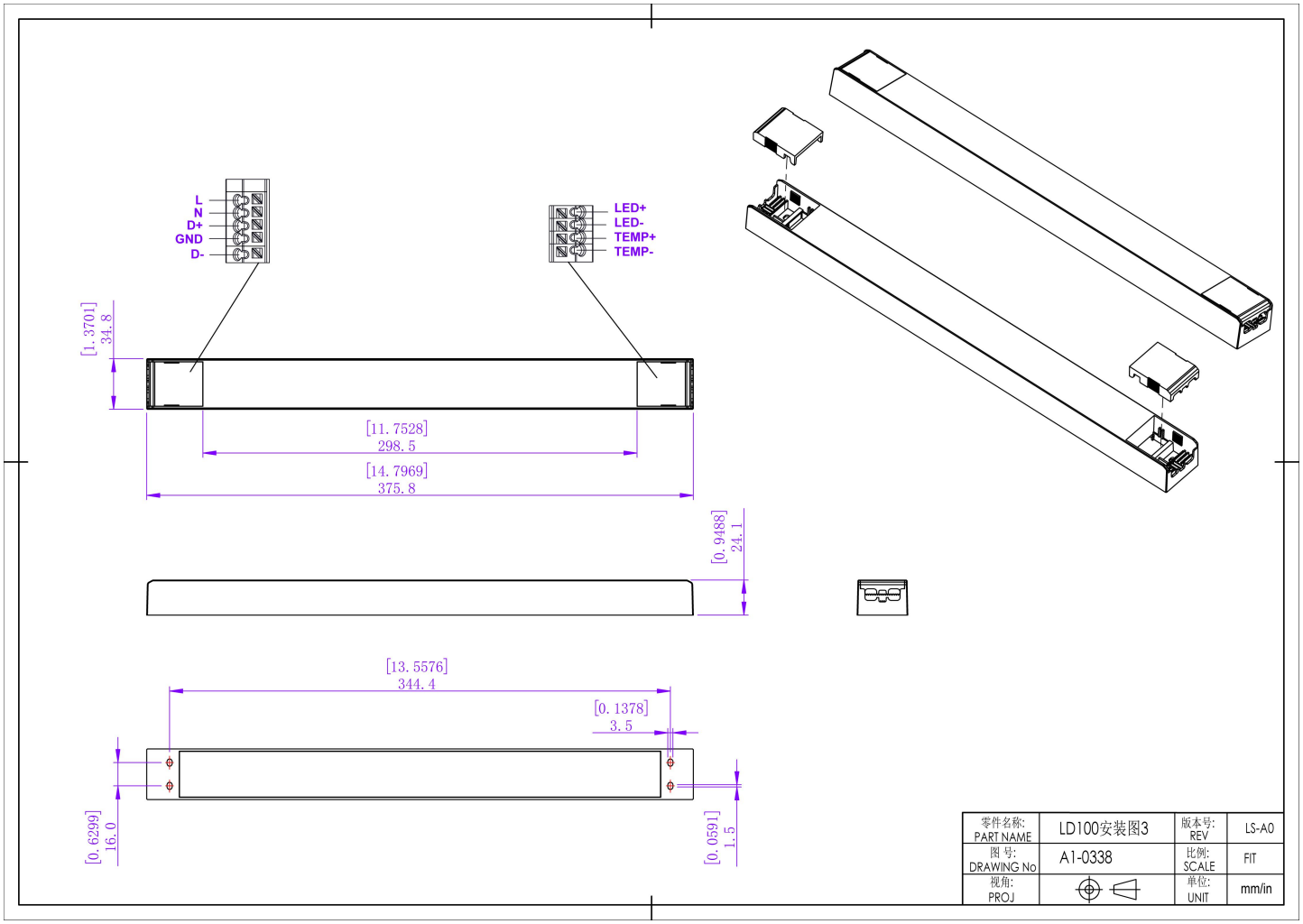


Derating Curve (output load vs TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

Mechanical Specification



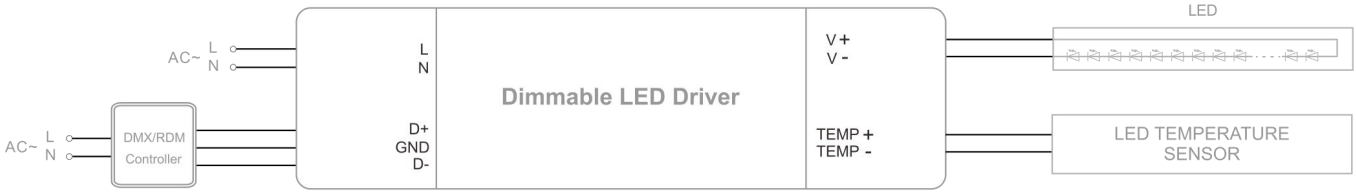
Global wire gauge	
LD100	
Input wire and Dimming wire	Gray terminals 5P (0.75mm²-1.5mm²/18-16AWG)
Output wire and External temperature wire	Red/Black terminals 4P (0.5mm²-1.5mm²/18-16AWG)
Remarks：Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.	

Warm tips:

1. Suggested wire diameter : Input: 0.2mm²-1.5mm²/AWG24-16.
2. Any other requests for, we can customize.

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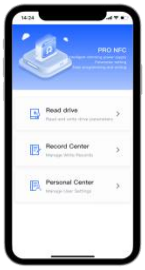
Dimming Operation and Connecting Diagram



Note:

The model name DLI-060WXXX-DMXS-T means that there is no auxiliary power supply but there is temperature control, so the LED driver has no auxiliary power wiring.

NFC Function



ProNFC APP



NFC Handheld devices

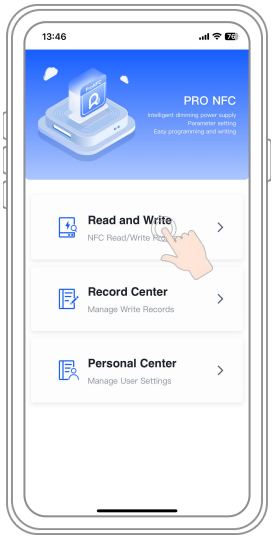
IOS Download

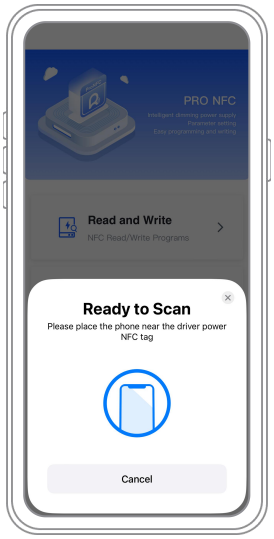
Android Download

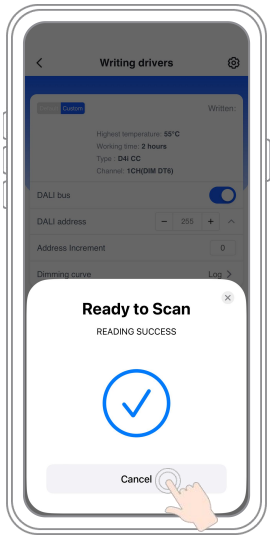
Open the ProNFC APP, Click on the "Read and Write"

Use the phone's NFC sensing area close to the driver's NFC marking area

Wait for the successful reading







Setting address

1. **Setting address:** Set address parameter of the power. **(Figure 1)**
2. **Address Increment:** Next to the address, there is an arrow symbol that can be clicked to collapse or expand the address auto-increment setting below, enter the value 0~10 to automatically perform the address auto-increment operation after a successful write, and 0 to turn off the auto-increment. (Example: Set self-add 1, address is 2, then the address will be changed to 3 automatically after successful writing) **(Figure 2)**

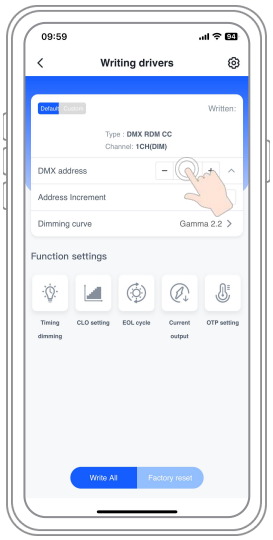


Figure 1

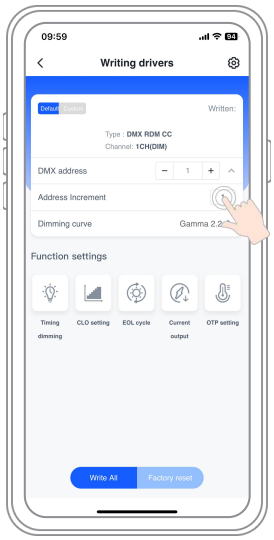


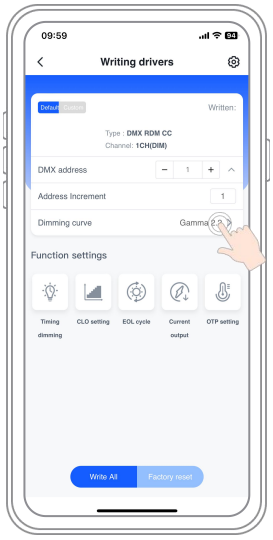
Figure 2

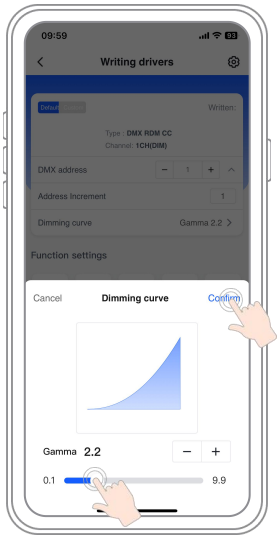
Dimming curve

Adjust the power supply custom Gamma curve.

Drag the slider bar to quickly adjust the curve left or right, while the upper curve image will change according to the value in real time.

Click the + or - sign on the pop-up window page to precisely adjust the value of the Gamma custom curve in steps of 0.1~9.9, with a step of 0.1 each time, while the upper curve image will change according to the value in real time.





Timing dimming

Timing dimming control includes 3 kinds of modes, they are self adapting-midnight, self adapting percentage and traditional timer. Three modes can be set via NFC.

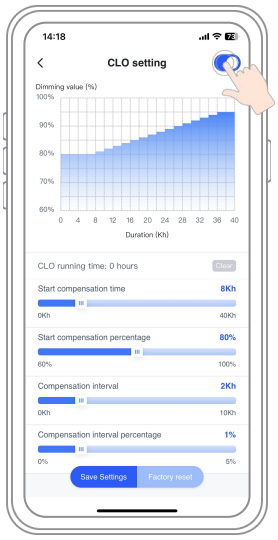


1. **Traditional Timer:** Follows the programmed timing curve after power on with no changes.
2. **Self Adapting-Midnight:** Set the midpoint time of the dimmer curve, the dimmer will automatically adjust the working curve according to the total working time of the past few days, if difference <30 minutes(The midpoint is set at 0 point, the user can set the offset, can be positive and negative offset for 4 hours)
3. **Self Adapting-Percentage:**

   Automatically adjust the working hours according to the last few days (increase or decrease according to the initialization time and effective working time)

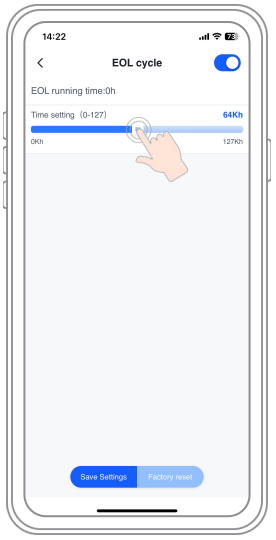
CLO setting (Constant Lumen Output setting)

This function is mainly used to maintain the constant brightness output of the LED. During the life cycle of LED, by gradually increasing the driving current of LED, to compensate for the light decay caused by the long operation of LED, thus ensuring the constant optical flux output of LED.



EOL cycle (End-Of-Life cycle)

Once this function is started, the output current of the LED drive automatically decreases to 1% of the total current and lasts for 1 minute, reminding the user to replace the LED lamp and reaching the service life designed by the supplier.



Current output

Output current function is used to control the brightness and power of LED lights. Users can set the current value on the page, and the system will draw a curve graph in the working area according to the set current value.



(Interface is for reference only and subject to actual reading)

OTP setting (Over-Temperature Protection setting)

During use, if the power supply detects that the external temperature of the luminaire exceeds the preset threshold, it will automatically trigger the over-temperature protection and reduce the power supply current value to avoid the luminaire from overheating and causing damage.



Instructions

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver cannot work normally, don't maintain privately.

Have any questions, please contact Zhuhai Shengchang.

Please visit our website or contact us for more information! www.scpower.net.cn/