# DIMALED DLight

# **LED Control System**

**YEARS**12-24V
IP67

### Adjust the brightness of your sign according to surrounding light

- ► Keep your application properly lit at any time • Reduce light pollution
- ► Easy to use, Autonomous system
- ► Outdoors or indoors
- ► Choose 8 pre-set programs or Customize your own





# **DIMALED DLight**



#### SOPHISTICATED DIMMING SYSTEM MADE A DELIGHT

Add a brain to your sign that makes it function at its best by adapting to its environment, delivering brightness and savings at the right time.

#### **BENEFITS:**

The sign or illuminated application will shine beautiful at its brightest when the night starts (when the sign is most visible, it will also be most noticeable). Additional energy-savings of 40% (compared with same application but not-dimmed). Assure your client full compliance with fast-changing Light-Pollution normatives and/or customers new preferences to new lighting conditions around the application (increased or decreased quantity of illuminated elements to compete with for customer's attention, or cloudy days).

The 24-hrs applications will benefit the most because the daylight and nightlight conditions are very different and thus call for a different light brightness. Examples: indoor signs located inside airports, train stations, gas stations, etc.

Complete IP68 system that is easy to set.

Invisible system but can be controlled by remote control.

#### TECHNICAL DATA

Model	DIMALED DLight Controller 1x8A 12- 24V and Sensor IP68 Dimaled mini booster Single Colo 1x8A 12-24V IP68		DIMALED DLight Remote	
Code	21100039	21100015	21100038	
PWM	256 levels	-		
Overload protection	Yes	Yes	-	
Overheat protection	Yes	Yes	-	
Working Voltage	DC 12-24V	DC 12-24V		
Connecting Distance	<10 meter (open area)	-	<10 meter (open area)	
Working Temperature	-30 to +50°C	-30 to +50°C	-	
Rated Output Current	1x8A	1x8A	-	
PWM Frequency	1 KHz	-	-	
Efficiency	Efficiency -		-	
IP Grade	IP68	IP68	-	
Dimension	Dimension 87x21x8,5 mm		115x52x5 mm	
Battery -		-	CR2025 battery	

#### LIFETIME & WARRANTY

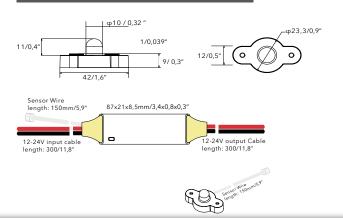
▶ Warranty : 5 years▶ Lifetime : 50,000 hrs

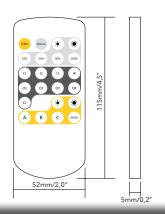
#### **NORMS & CERTIFICATES**

- ► EN 62479:2010
- ► EN 60950-1:2006+A11:2009+A1:2010+A12: 2011+A2:2013
- ► ETSI EN 301 489-1 V2.2.0:2017-03
- ► ETSI EN 301 489-3 V2.1.1:2017-03
- ► ETSI EN 300 220-1 V3.1.1:2017-02
- ► ETSI EN 300 220-2 V3.1.1:2017-02



#### **DIMENSIONS**

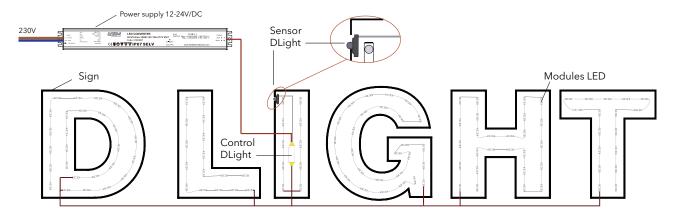




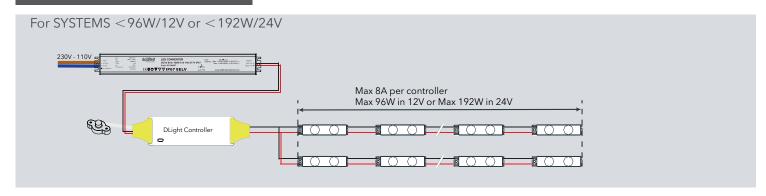
# **DIMALED DLight - Wiring**

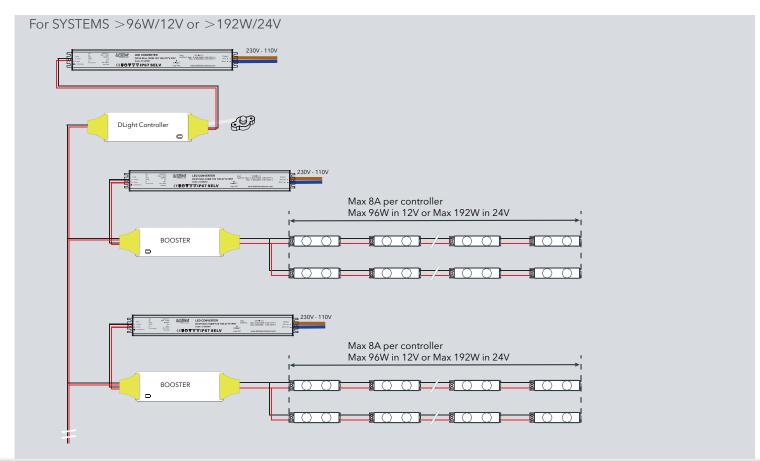


#### WIRING CONCEPT



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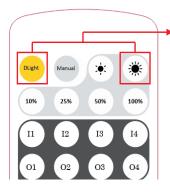




# **DIMALED DLight - Remote controll**



#### PAIRING METHOD

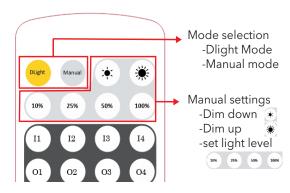


Within 10 seconds of power-on of the controller, hold down the first and last in the first row of the remote controller as shown in the attached pictures, and the indicator flashes three times to make the matching successful.

#### **UNPAIRING METHOD**

That is, any remote controller can be paired once to remove other remote controllers.

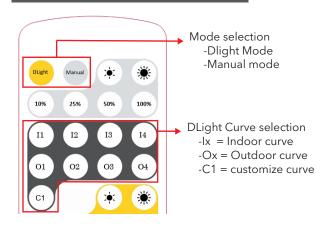
#### MANUAL MODE



Manual mode allows you to set the light level of your choice and adjust the brightness of the sign to the surrounding light environment.

It gives you the flexibility to be brighter than other signs nearby, and also to dim it easily if required by new emerging regulations or neighbours are not happy with the light produce by the sign.

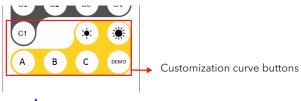
#### DLIGHT MODE



We preset 6 different curves into the controller. You can select these curves by pushing the buton I1 to O4. To see how are these curves, please see page 5.

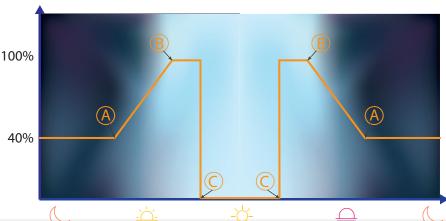
C1 is the customized curve that could be set as you wish.

#### **CUSTOMIZATION MODE**



This part is to customize the curve C1. Each point A, B and C can be set at different values and at different daylight levels.

The following curve can be customized easily, see page 6.



# **DIMALED DLight - Remote controll**



#### DLIGHT MODE WITH PRESETS

By pushing the Dlight button and Ix or Ox, you select a preset curve already installed in the controller. Below the details of these curves.

# B © 100% B

# 

#### **INDOOR CURVE PRE-SETTINGS**

	Points	% Brightness Sensor luxes	
	Α	80%	100 lux
<b>I1</b>	В	100%	900 lux
	С	100%	2500 lux
	Α	60%	100 lux
12	В	100%	900 lux
	С	100%	2500 lux
	A	40%	100 lux
13	В	100%	900 lux
	С	100%	2500 lux
	Α	20%	100 lux
14	В	100%	900 lux
	С	100%	2500 lux

#### **OUTDOOR CURVE PRE-SETTINGS**

	Points	% Brightness Sensor luxes		
	Α	80%	100 lux	
01	В	100%	900 lux	
	С	0%	2500 lux	
	Α	60%	100 lux	
02	В	100%	900 lux	
	С	0%	2500 lux	
	A	40%	100 lux	
03	В	100%	900 lux	
	С	0%	2500 lux	
	Α	20%	100 lux	
04	В	100%	900 lux	
	С	0%	2500 lux	



#### **CUSTOMIZATION PROCEDURE WITH REMOTE**

As explained before A, B and C points can be set up as you want. The following procedure will explain how to proceed.

1 - Push DLight



2 - Push C1



3 - Push A to set point A.



4 - LED will flash 4 times.

5 - Set up the LED light LEVEL you want with :



6 - Push A button to save value of LED light level and the lux level measured by the sensor at this time.

7 - LED will flash 2 times when value will be saved in the DLight.

8-Restart complete procedure from the beginning to set B and C points.

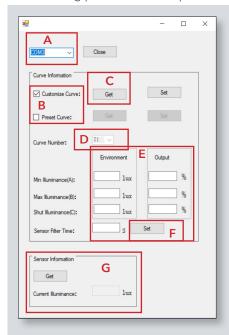
Just push B and C buttons instead of A in step 3.

For OUTDOOR curve, it will be best to define this point at a period when the daylight is at the maximum to be sure to set the best value.

For INDOOR curve, it will be best to define these points when the daylight is at the minimum to be sure to catch the standard light level of the installation place (airport terminal).

#### CUSTOMIZATION PROCEDURE WITH USB SOFTWARE

As explained Before A, B and C points can be set up as you want. The following procedure will explains how to proceed:

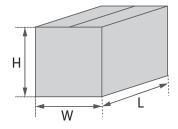


- 1-Connect the Computer with the USB accessory to the control (without the sensor)
- 2- Start the software
- 3-Select the communication port (button "A")
- 4-You can set the Customize or the Preset curve by selecting the option (button "B"), then you can read the setting which are in the controller by pressing on button "Get" (button "C")
- 5-Select the curve number you want set (button "D")
- 6- Define the light level and the sensor light level (follow the rules:  $A < B \le C lux$ ) (button "E")
- 7- Save the value in the controller (button "F")
- 8- If you want to know the Lux level measured by the sensor, please connect the computer with the USB accessory to the sensor (without the controller) click on "Get" (Button "G"), and the lux value will appear.



#### PACKAGING

	Туре	SIZE - Lx- WxH (cm)	SIZE - Lx- WxH (ft)	Weight (Kg)	Weight (Lb)	Nb of Pcs / box
CARTON	DIMALED DLight Controller with sensor	54x29x28	1,8x0,95x0,9	8,0	17,6	100
	DIMALED DLight Remote	32x22x25	1,0x0,7x0,8	4,2	9,2	100



#### CAUTION

Controller is a "Built-in component", designed to be used in Indoors or Outdoors applications. Mounting position of the Master has no impact on the sign because the antenna is multi-directional. Max distance between the Master and the Slaves:

-10 mtrs in open areas

Do not install the master or slaves inside earth metal electric box because it would affect the signal quality. After installation, please test that all slaves receive well the signal from master. If not receiving well the signal, install a Repeater half distance between master and slave. Do not install 2 repeaters close together because this could only cause interferences.

The signal between Slave and LED is a 12 or 24 PWM signal. Please make sure that:

- Distance of cable is as short as possible (avoid voltage drop)
- Wiring cables are kept separate: 230V, 12 or 24V power supply, and PWM (you can use plastic cable ducts to keep cables separate)
- Do not twist cables together as it would cause interferences
- Shielded cable can be used for PWM signal