FL 1000 XT C DMX

LED light generators with DMX controlled colour- or twinkle wheel.
Dual light generators with both color and twinkle.
All units with DMX controlled dimming 0-100%.

User manual

Item no.:	0123 6310	FL 1000 XT C DMX Colour 3000K
	0123 6315	FL 1000 XT C DMX Twinkle 3000K
	0123 6320	FL 1000 XT C DMX Colour 4000K
	0123 6325	FL 1000 XT C DMX Twinkle 4000K
	0123 6410	FL 1000 XT C DMX Dual 3000K
	0123 6420	FL 1000 XT C DMX Dual 4000K

Roblon

+99082098 02.11.2015

Contents.

1 Introduction
2 Product overview when unpacking
3 DMX addressing the light generator
    3.1 Factory default setting
    3.2 Factory custom set up addresses
    3.3 Setup of the DMX adresses on site
4 DMX protocol
5 Surface-mounting
6 Installation
7 Installing in closed compartments
8 Installing one or more light generators
9 Technical data
10 Spare parts
11 Accessories
12 Troubleshooting

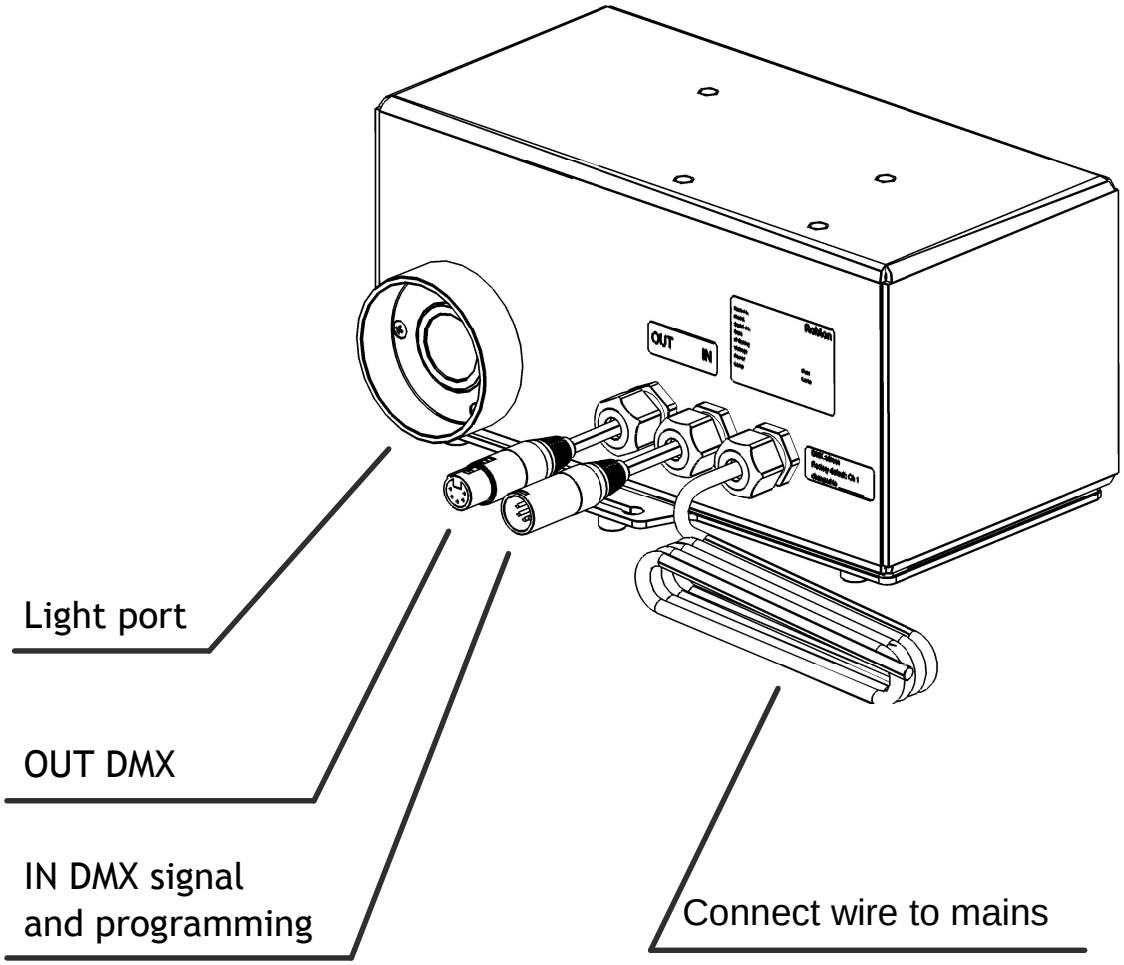
1. Introduction.

Roblon FL 1000 XT C DMX light generator with DMX controlled colour and twinkle wheel as well as very smooth controlled dimming are designed for use outdoors with glass or PMMA fibre in all installation set-ups, including in closed compartments.
Weatherproof, waterproof LED light generator.
Cuts energy consumption by min. 63% compared with equivalent halogen generators. For functional and decorative tasks outdoors and in wet locations. Ideal for fountains, public art, facades, signage, parks, gardens and swimming pools

Follow the installation instructions correctly in order to ensure
- safe operation
- enhanced functionality
- extended lifetime for components
- uninterrupted illumination

2. Product overview
when unpacking the light generator.

FL 1000 XT C DMX light generator
Allen key
Screws w/ plugs
User manual



3. Addressing set up of the light generator:

3.1. Factory default setting:

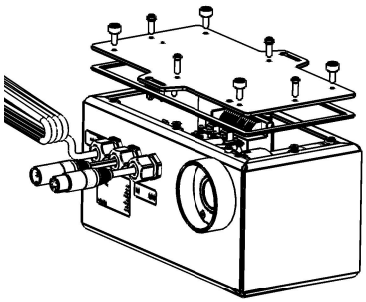
Factory default Address settings are as follows:
Electronically setting:
CH1 dimming 0-100%
CH2 Dimming 16 bit (High resolution 65536 levels).
Mecannically setup directly on the hardware inside the unit:
CH3 DMX addressable special functions.
CH4 Colour wheel.
CH5 Twinkle wheel.

3.2. Factory custom set up addresses:

You can order a custom addressing (part number 9903 0071) of the unit when ordering the light generators. The light generators will be supplied with a label informing about the settings.

3.3. Setup of the DMX addresses on site:

3.3.1. Please note that the following steps requires a skilled technician. And that working on a light generator with the lid off requires a trained electrican. Use caution!

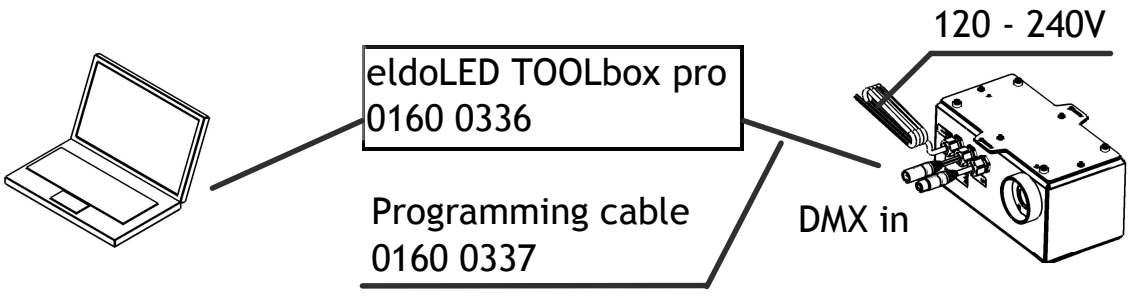


Turn the light generator upside down
and remove the eight screws and
then remove the lid and sealing.

On www.eldoled.com/software download software for
eldoLED TOOLbox pro: eldoLED FluxTool software v1.04 MAC.zip
eldoLED FluxTool software v1.04 WIN.zip or
eldoLED Showmaster DMX software v 1.5.zip

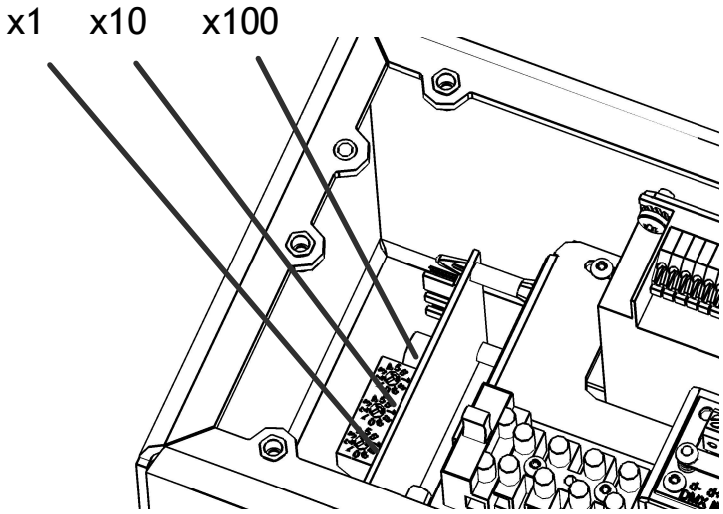
Download and follow user manuals in: User manuals/Accessories/User Manual TOOLbox PC Software v1.0.pdf.

Connect TOOLbox as shown and follow eldoLED manual.



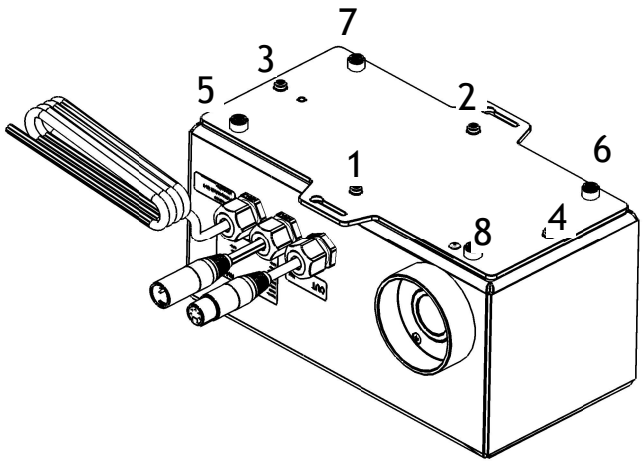
According to DMX protocol driver address should be set to light generator desired DMX address.
Driver:
Channel 1: Dimming 0-100% light
Channel 2: Dimming. Fine resolution, 16 bit (LSB: Least Significant Bit).
(One DMX channel represents a number from 0 to 255 which is a 8 bits number. In order to have more than 256 DMX steps, two channels can be combined (256 times 256). This is called 16 bits resolution).

3.3.2. Wheel control board code on driver. Wheel must be set to driver DMX address +2.
Example: DMX address 1 on driver - wheel sets to address 3
DMX address 8 on driver - wheel sets to address 10.

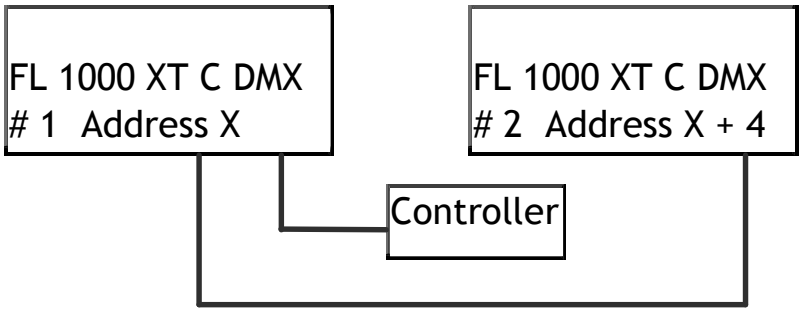


Light generator channel	Driver	Wheel control board
CH 1	1	3
CH 2	2	4
CH 3	3	5
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
CH 508	508	510

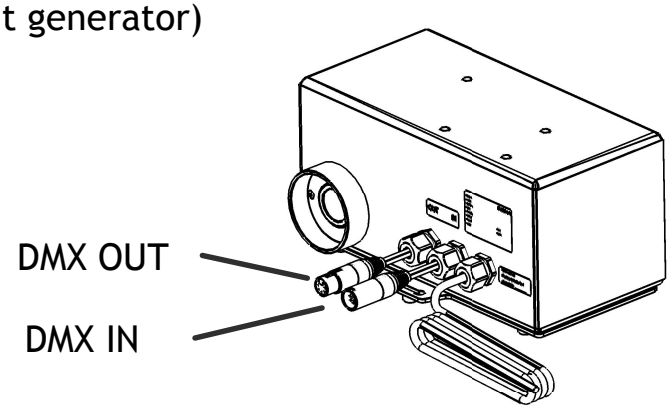
3.3.3. When the light generator is addressed replace the sealing and the lid and fasten the screws on cross to example as shown to up.
Beware of the sealing: it has to lay plain on the light generator but may not be destroyed.
It is critical to be IP 65.



Connecting the light generators.



Address (First used channel in light generator)



4. DMX protocol.

CH 1 0 - 255	 0 - 100% light intensity
CH 2 0 - 255	 Hi - res 16 bit dimming (LSB)
Control:	5 sec. delay on all functions
CH 3 000 - 050 051 - 070 071 - 080 081 - 100 101 - 120 121 - 144 145 - 160 161 - 179 180 - 255	 Not assigned Shortest mode Not assigned Linear mode Not assigned Reset wheel Not assigned Reset wheel Not assigned

CH 4	
	<u>Colour wheel</u>:
000 - 200	Position of wheel
000 / 200	White
033	Green
067	Orange
100	Blue
133	Red
167	Yellow
201 - 205	Not assigned
206 - 207	Variable speed of rotation clockwise (10 rpm.)
208 - 210	Variable speed of rotation clockwise (5 rpm.)
211 - 212	Variable speed of rotation clockwise (3 rpm.)
213 - 215	Variable speed of rotation clockwise (2 rpm.)
216 - 219	Variable speed of rotation clockwise (1 rpm.)
220	Variable speed of rotation clockwise (0.8 rpm.)
221 - 223	Variable speed of rotation clockwise (0.6 rpm.)
224 - 225	Variable speed of rotation clockwise (0.4 rpm.)
226 - 228	Variable speed of rotation clockwise (0.2 rpm.)
229 - 230	Variable speed of rotation clockwise (0.1 rpm.)
231 - 232	Variable speed of rotation counter clockwise (10 rpm.)
233 - 235	Variable speed of rotation counter clockwise (5 rpm.)
236 - 237	Variable speed of rotation counter clockwise (3 rpm.)
238 - 240	Variable speed of rotation counter clockwise (2 rpm.)
241 - 244	Variable speed of rotation counter clockwise (1 rpm.)
245	Variable speed of rotation counter clockwise (0.8 rpm.)
246 - 248	Variable speed of rotation counter clockwise (0.6 rpm.)
249 - 250	Variable speed of rotation counter clockwise (0.4 rpm.)
251 - 253	Variable speed of rotation counter clockwise (0.2 rpm.)
254 - 255	Variable speed of rotation counter clockwise (0.1 rpm.)

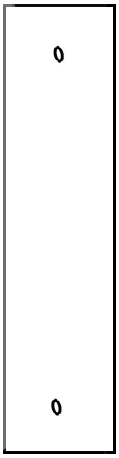
CH 5	
	Twinkle wheel:
000 - 200	Position of wheel
000 / 167	White / open
033 - 133	Only twinkle
201 - 205	Not assigned
206 - 207	Variable speed of rotation clockwise (10 rpm.)
208 - 210	Variable speed of rotation clockwise (5 rpm.)
211 - 212	Variable speed of rotation clockwise (3 rpm.)
213 - 215	Variable speed of rotation clockwise (2 rpm.)
216 - 219	Variable speed of rotation clockwise (1 rpm.)
220	Variable speed of rotation clockwise (0.8 rpm.)
221 - 223	Variable speed of rotation clockwise (0.6 rpm.)
224 - 225	Variable speed of rotation clockwise (0.4 rpm.)
226 - 228	Variable speed of rotation clockwise (0.2 rpm.)
229 - 230	Variable speed of rotation clockwise (0.1 rpm.)
231 - 232	Variable speed of rotation counter clockwise (10 rpm.)
233 - 235	Variable speed of rotation counter clockwise (5 rpm.)
236 - 237	Variable speed of rotation counter clockwise (3 rpm.)
238 - 240	Variable speed of rotation counter clockwise (2 rpm.)
241 - 244	Variable speed of rotation counter clockwise (1 rpm.)
245	Variable speed of rotation counter clockwise (0.8 rpm.)
246 - 248	Variable speed of rotation counter clockwise (0.6 rpm.)
249 - 250	Variable speed of rotation counter clockwise (0.4 rpm.)
251 - 253	Variable speed of rotation counter clockwise (0.2 rpm.)
254 - 255	Variable speed of rotation counter clockwise (0.1 rpm.)

5. Surface-mounting.

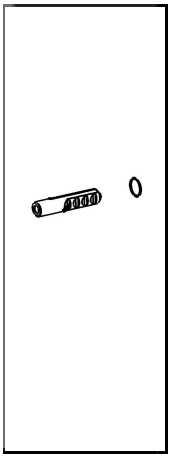
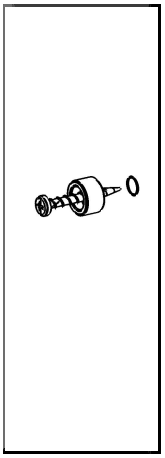
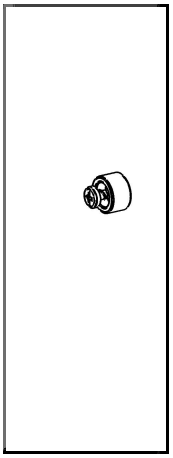
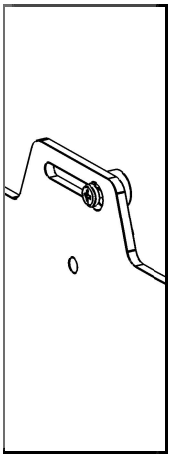
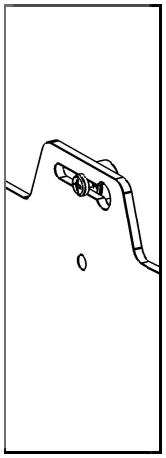
5a Surface-mounting.

1. Attach to surface using two screws in the baseplate holes.

2. Vertical installation: to maintain IP 65 protection, mount with the light port facing down.



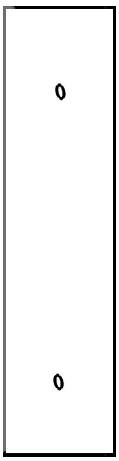
170 mm between Ø6 mm holes

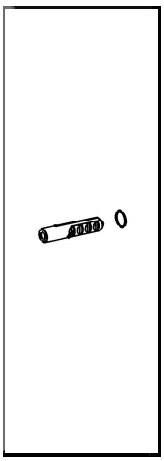
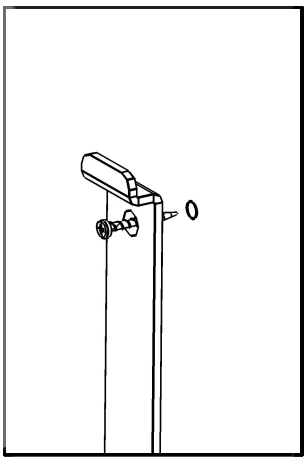
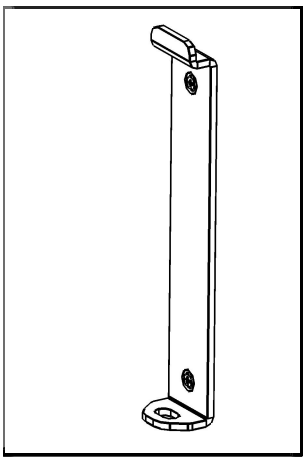
5b Bracket-mounting.

1. Attach the bracket (not supplied; see Accessories) to the surface using two screws.

2. Mount the light generator on the bracket.



140 mm between Ø6 mm holes

6. Installation.

1. Remove the plastic plug on the baseplate, directly bellow the light port.

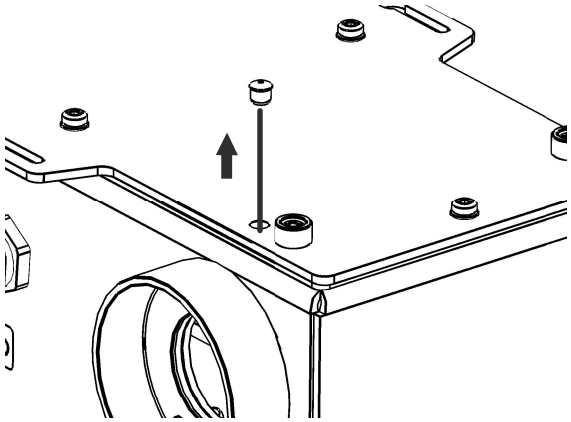
2. Insert the common end fully in the light port.

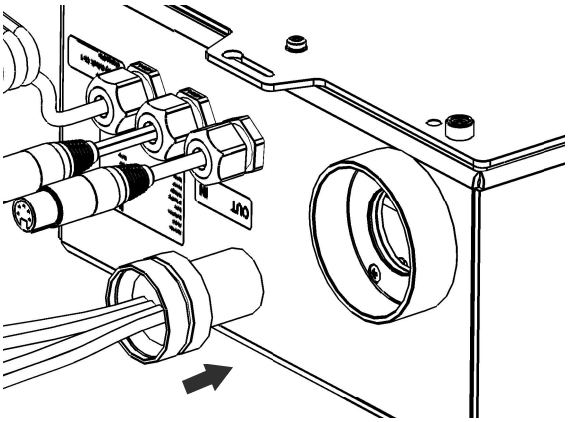
3. Tighten the screw on the base with the Allen key.

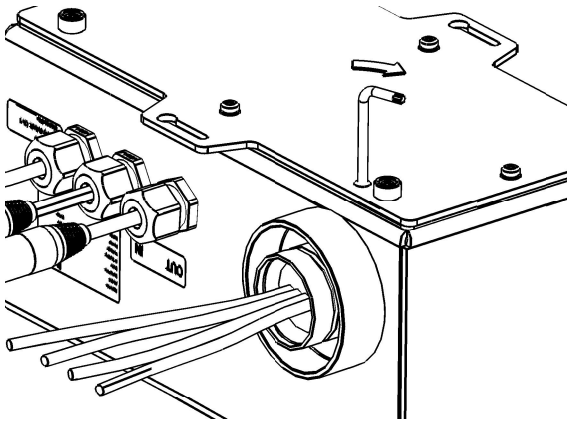
4. Insert the plastic plug. (Important to be IP 65!)

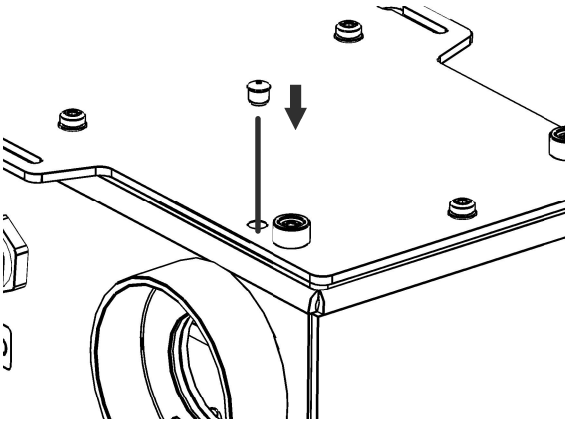
5. Ensure all installation and ventilation requirements are met.

6. Connect the power cord to the mains.





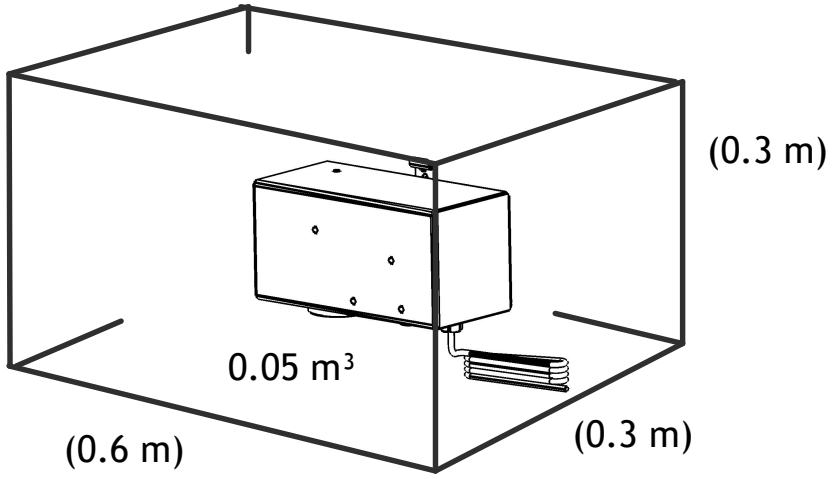




7. Installing in closed compartments.

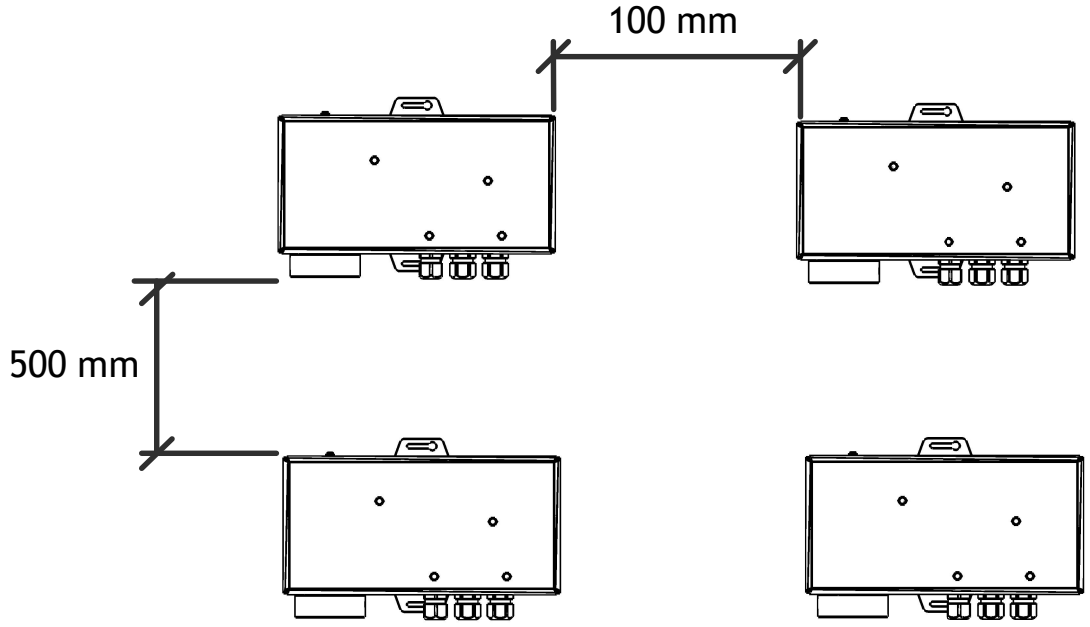
Requirements:

Enough space to allow natural heat transmission through surfaces
Surfaces should not be insulated
Air volume per light generator minimum 0.05 m^3
Ventilation holes per light generator with min. 20 cm^2 air inlet and min. 20 cm^2 air outlet
Inlet and outlet ventilation holes opposite each other
Max. ambient temperature 45°C. (Measuring temperature: see 'Troubleshooting')



8. Installing one or more light generators.

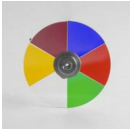
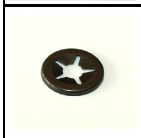
Requirement: min. 100 mm distance between adjacent light generators in order to ensure sufficient heat transmission



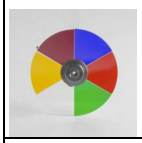
9. Technical data.

Light port	Ø28 mm
Fibre type	PMMA / Glass
Total power consumption @ 700 mA	26 W (Single wheel) 31 W (Dual wheel)
Supply voltage	120-240 V / 50-60 Hz
Applied LED	LUXEON S1000 LXS8-PW30 (3,000 K) LUXEON S1000 LXS8-PW40 (4,000 K)
Light source lifetime	50,000 hours
CCT (nominal)	3,000 K / 4,000 K
CRI8 (Ra) typical value	85
Protection rating	IP 65
Driver type	Electronic
Driver lifetime	50,000 hours
Dimmable	DMX
Thermal protection	Integrated auto
Cooling system	Natural convection
Noise level	N/a
Ambient temperature	-20°C to 45°C
Material	EN AW-5754 (AlMg 3) + POM
Dimensions (L x H x W)	298 x 185 x 151
Weight	3.8 kg
Safety	CE, RoHS, F
DMX Connection	XLR 5 pin

10. Spare parts.

Image	Model designation	Description	Item no.
	Eldoled	Driver Powerdrive Eldoled 50W	1104 1300
	Colour wheel	Standard 6 colour	5100 0085
	Twinkle wheel		5100 0092
	Diode LED	LED module, no cooling	0129 4004
	Effekt motor for DMX	Stepper motor 1.8°	6400 4000
	Spring-clip 4 mm	Lock for wheel	9100 6304

11. Accessories.

Image	Model designation	Description	Item no.
	Mounting bracket	Bracket that can be padlocked	0126 7000
	Colour wheel mix.	Standard 6 colour Custom specified colour wheel	5100 0153
	Colour wheel special	Rosco Permacolour Custom specified colour wheel	5100 0154
	EldoLED TOOLbox pro		0160 0336
	Programming cable for EldoLED toolbox pro	RJ45 to XLR 5 pin	0160 0337
	DMX adressing	Addressing of light generator form factory	9903 0070
	Sunlight USB Controller		0160 0302
	DMX programming	Programming of Controller	9903 0071
	DMX Cable	Cable between control unit and Light generator Please state required length	9903 0057
	Spring-clip 4 mm	Lock for wheel	9100 6304
	Kit for twinkle wheel	For insert in twinkle wheel to avoid constant white light.	0126 6220

12. Troubleshooting.

Problem	Trace the problem	Solution
No light	Is the power on?	Turn the power on
	Is the power cord connected properly?	Connect the power cord properly
	Is the light generator too hot*?	Check it is installed according to the instructions. Switch generator off. Let it cool for 15 minutes. Try again.
	Is the LED working?	Replace the LED
	Is the Supply fuse intact?	Replace the Supply fuse
	Check DMX	Set correct address, value and level
Light output has diminished	Has the light been dimmed via DMX	Increase brightness using DMX Controller
	Is the harness common end dirty?	Clean filter with damp cloth Dry with lint-free cloth

* Ambient temperature: max. 45°C. Measured 50 mm from light generator.
Surface temperature: max. 73°C. Measured 15 mm from edge on top of light generator when it has been running for min. 1 hour

Roblon accepts no responsibility for possible errors in printed and electronic material. Roblon reserves the right to alter or discontinue products without notice. ©2012, Roblon A/S

Roblon

Roblon Lighting
Nordhavnsvej 1
9900 Frederikshavn
Denmark

Tel: +45 9620 3366
Fax: +45 9620 3396
info@roblon.com
www.roblon.com