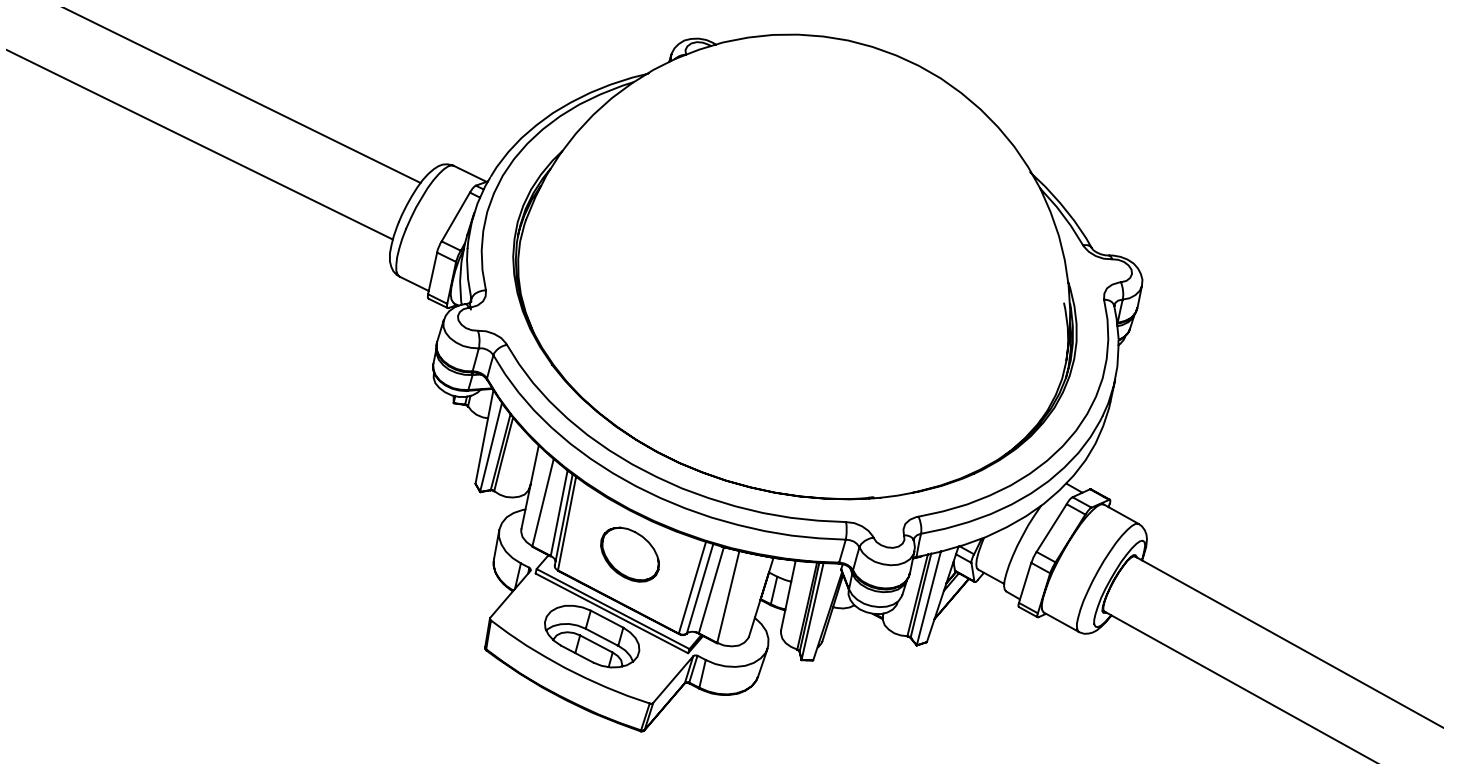


GRAPH-i-CELL

AL2076 AL2086 AL2088



Manuale di istruzioni
Instructions manual

 **GRIVEN**
world lighting challenge

INDEX

1.0 Introduction	12
1.1 Safety information	12
1.1.1 <i>Protecting against electric shock</i>	12
1.1.2 <i>Installation</i>	12
1.1.3 <i>Protection against burns and fire</i>	12
1.1.4 <i>Weather protection</i>	12
1.2 <i>Compliance</i>	12
2.0 Size	13
3.0 Packaging and transport	13
3.1 <i>Packaging</i>	13
3.2 <i>Transport</i>	13
4.0 Installation	14
4.1 <i>Fixing</i>	14
4.2 <i>Connection to main power and DMX signal</i>	14
5.0 Use of the unit	16
5.1 <i>DMX functions</i>	18
6.0 Spare parts	18
7.0 Disposal	18
8.0 Technical specifications	19


1.0 Introduction

1.1 Safety information

Warning!

This unit is suitable for professional use only, not for domestic use.


1.1.1 Protecting against electric shock

-  Class 3 device. It uses operating voltages inferior to 50 Volts. It excludes ground connection.
- Disconnect the unit from mains supply before servicing it or performing any other action.
- Before connecting the unit to power supplies, verify that operating voltage and frequency are compatible.
- Do not handle the unit with wet hands or in the presence of water.
- Check regularly that the power supply cable is not damaged or crushed.
- Apply to a qualified technician for any regular maintenance action not described in this manual.

1.1.2 Installation

- Fix the unit with screws, hooks or any other support able to bear the weight of the unit itself.
- If the unit is fixed onto a suspended structure, this structure is supposed to bear at least ten times the weight of all devices to be fixed.
- The unit installation actions must be performed by a qualified staff.

1.1.3 Protection against burns and fire

-  Suitable to be installed onto normally inflammable surfaces.
- Non installare l'apparecchio in locali in cui la temperatura ambiente supera i 40° (104°F).

1.1.4 Weather protection

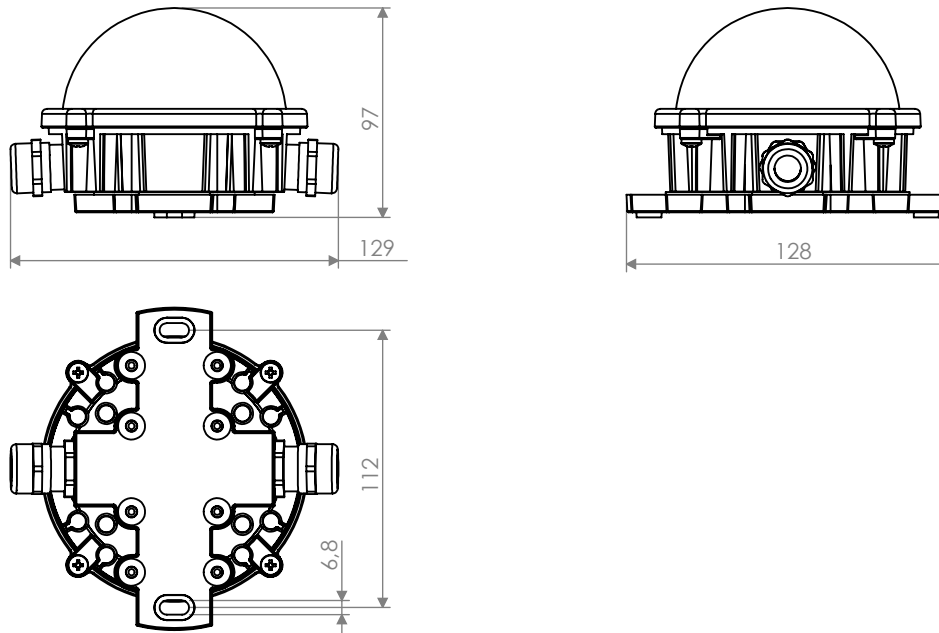
The unit is classified as device with an IP65 weather protection rate.

1.2 Compliance



- Product in compliance with EN60598-1 EN60598-2-17.
- Product in compliance with 2002/95/CE (RoHS).

2.0 Size



3.0 Packaging and transport

3.1 Packaging

Check carefully the content of the box and, in case of damage, contact your forwarder immediately. The following items are included in the box of this unit:

- n° 1 **Graph-i-Cell** (AL2076 or AL2086 or AL2088)
- n° 1 owner's manual
- n° 1 connection kit

Warning!

- **Griven S.r.l. liability will cease upon consignment of goods to the forwarder: claims for damage due to transport must be addressed directly to the forwarder.**
- **Griven S.r.l. will accept claims for broken or missing goods only within seven days of receipt of the goods.**
- **Returns of equipment will not be accepted without prior authorization granted by Griven S.r.l. and if not duly accompanied by relevant shipping documents.**

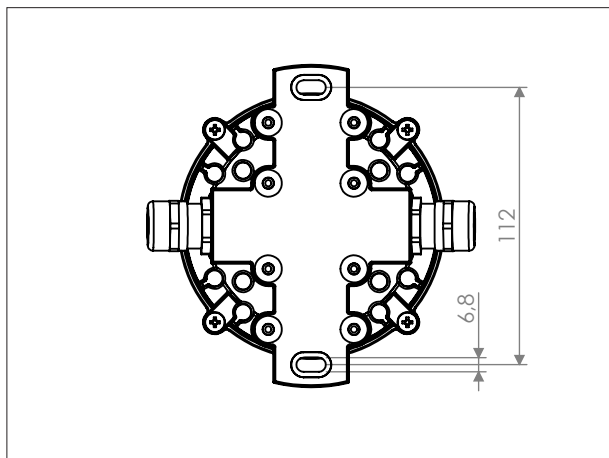
3.2 Transport

It is recommended to transport the unit with the maximum care, by using its original packing, to avoid to damage the unit.

4.0 Installation

4.1 Fixing

The unit can be used both rested on floor and fixed onto a structure. The unit can operate in any position.

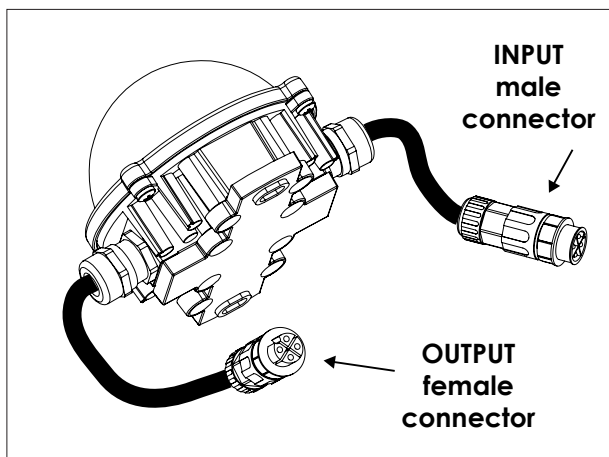


Use the two $\varnothing 6.8$ holes (0.26") on the box in order to fix the device

Warning!

Make sure that the structure can hold up to 10 times its weight.

4.2 Connection to main power and DMX signal



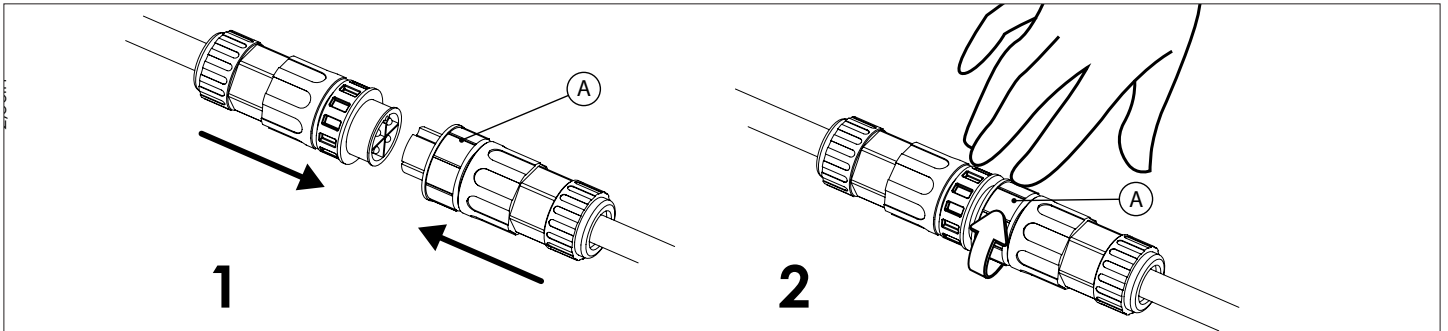
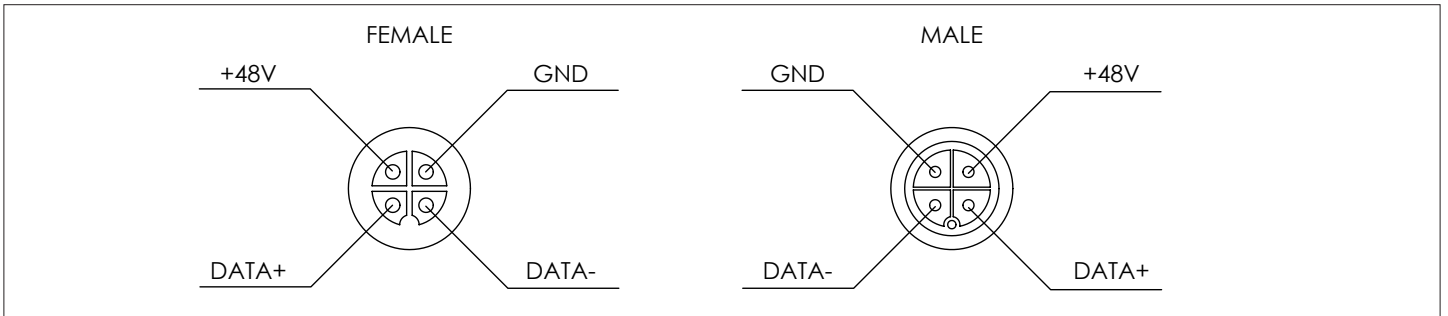
The unit is fitted with IP68 connectors for the connection of the of the main supply and of the DMX signal, as shown in the pictures.

To connect the control signal or the line terminal plug, EXCLUSIVELY GRIVEN cable are to be used, in order to preserve the IP68 weather protection rate.

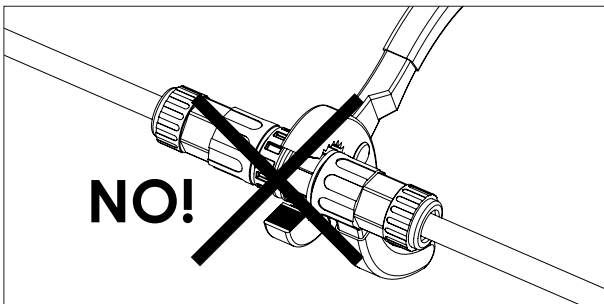
The unit operate with voltage of 48VDC.

Warning!

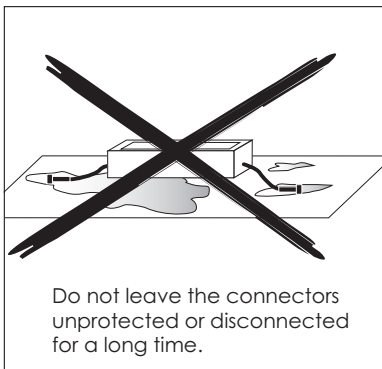
- Before connecting the unit, verify that power supplies features are compatible with the unit features.
- It is suggested to use a magnetothermic switch along the power supply line, as prescribed by in force rules.
- The unit must not be powered up through a dimmer power device.
- Wiring and connection actions are to be performed by a qualified staff.



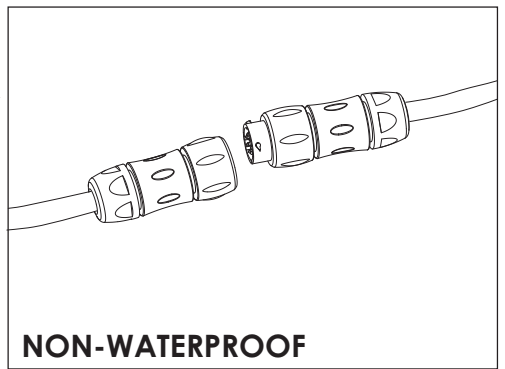
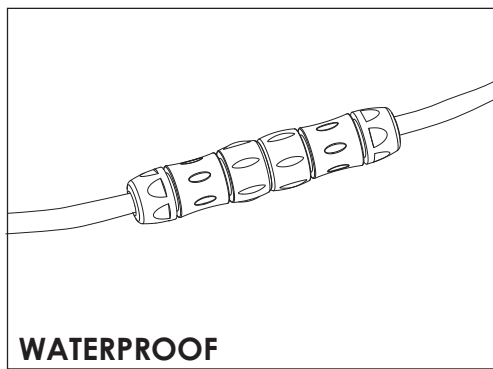
Plug the connectors by screwing the ring "A" by hand.



Warning!
Do not screw the connectors with pliers or other tools, as they might damage.



Do not leave the connectors unprotected or disconnected for a long time.



Leaving the connectors unprotected or disconnected may cause water infiltrations and consequent product malfunctioning.

Should it not be possible to connect the units during the installation phase, please protect their connectors with suitable caps.

The output connector of the chain last fixture must necessarily and permanently be protected by a suitable cap or end line cap, if required.

Warning !
Connect the units only after disconnecting the mains!

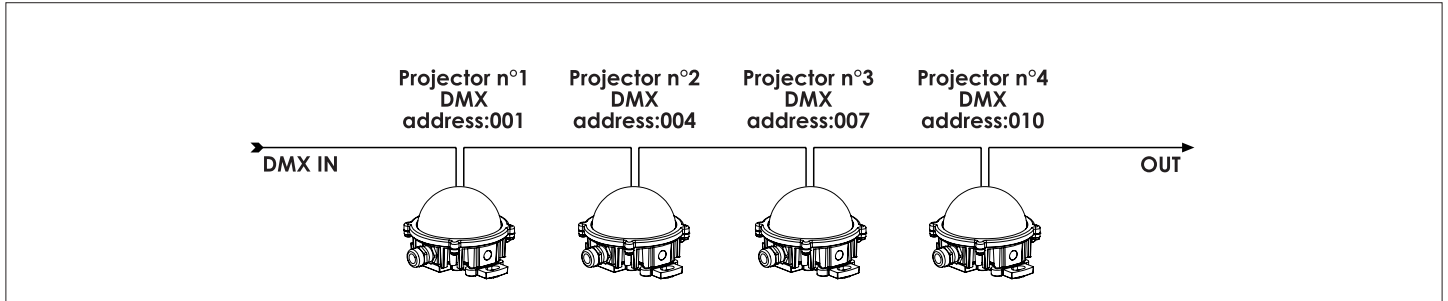
5.0 Use of the unit

The **Graph-i-Cell** unit has been designed for use "plug and play".

After being connected to power supplies and DMX signal, in fact, the unit is ready to be used and no sort of intervention is necessary.

Each unit uses **3** DMX channels and is fitted with a self-addressing system. By this system, connecting the **Graph-i-Cell** units in series, each unit automatically sets its own initial DMX address, starting from the channel following the one of the previous unit.

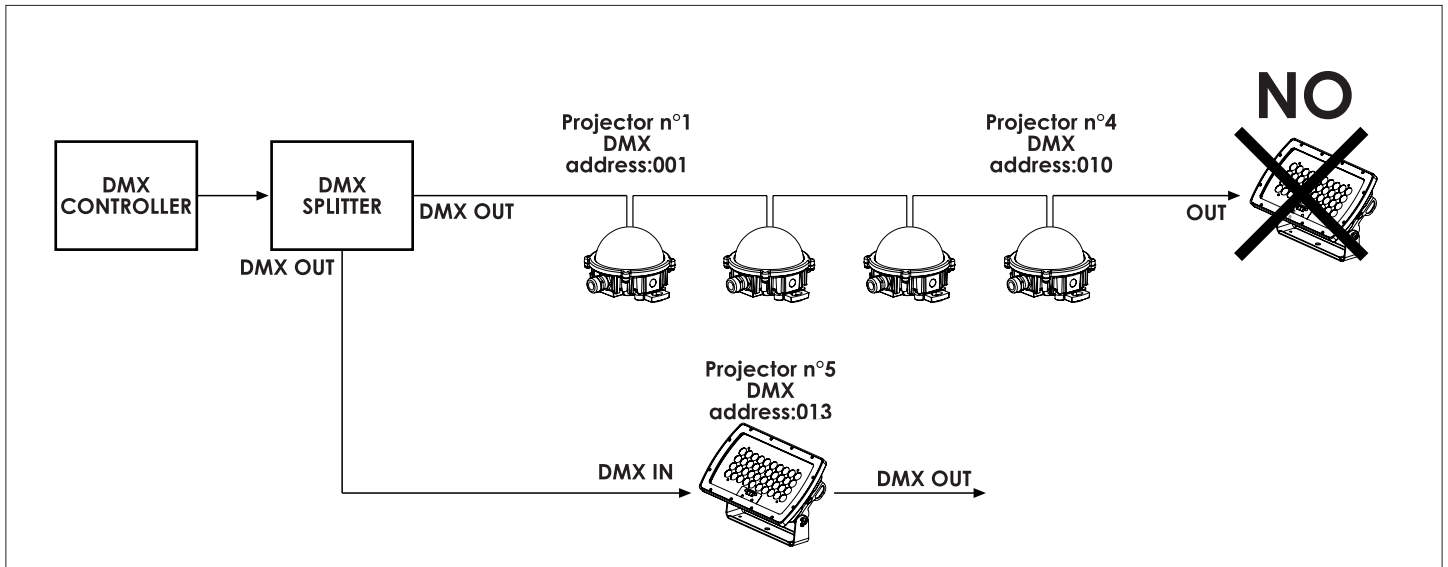
The following picture shows a connection example.



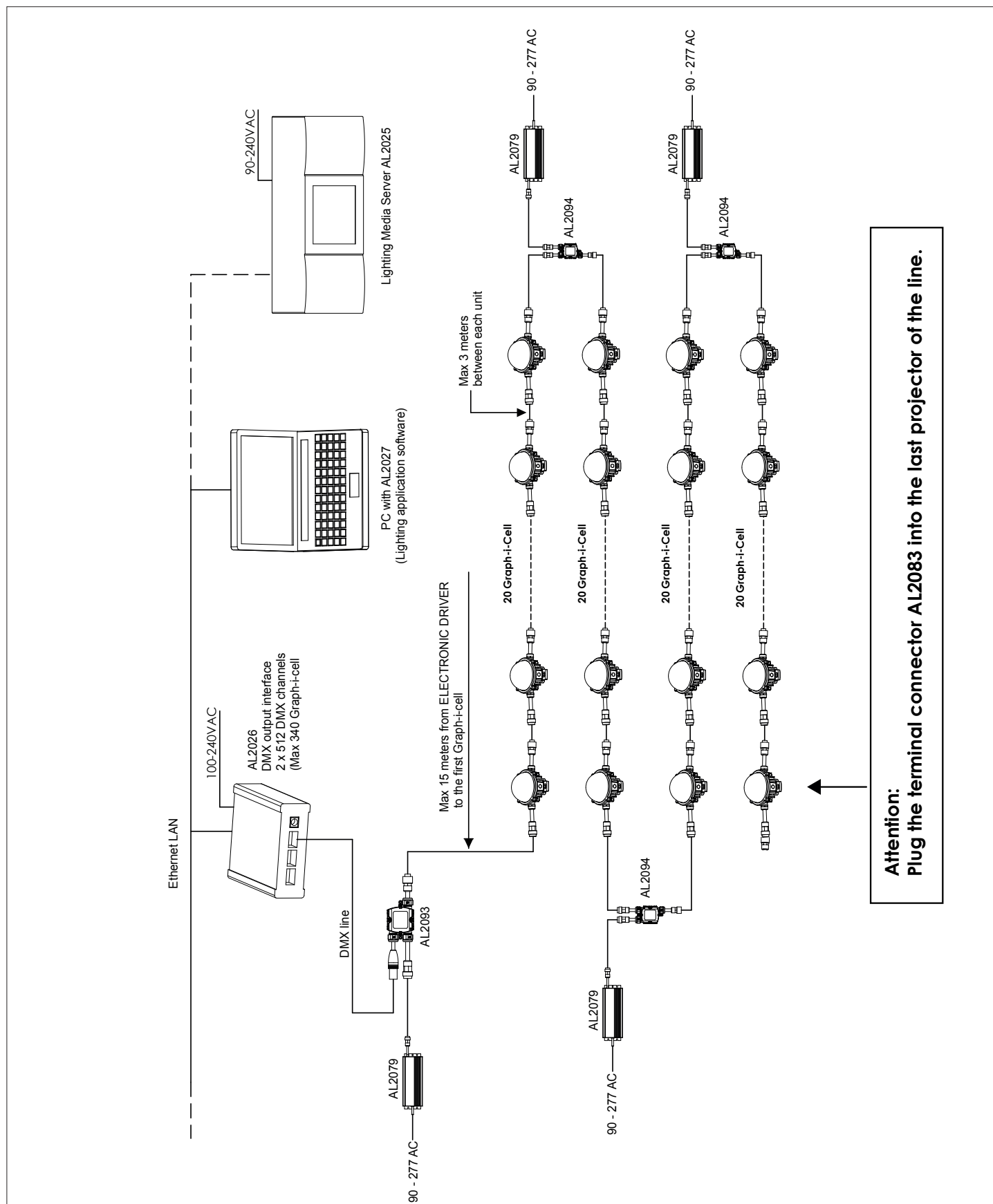
Warning!

The Graph-i-Cell output DMX signal cannot be used to control different models of projectors!!
If different projectors are in the same DMX universe, they must be put in the output DMX line of the controller and set by considering the channels used by the Graph-i-Cell units.

The following picture shows an example of installation with different types of projectors.



The following picture shows an example of installation with DMX control and electronic driver.



Warning!
 The maximum cable length between the electronic driver AL2079 and the first unit is 15 mt.
 The maximum cable length between one unit and the next one is 3 mt.

5.1 DMX functions AL2076

Channel	Function	Value	Description
1	Red	0-255	Proportional control 0-100% of the Red color
2	Green	0-255	Proportional control 0-100% of the Green color
3	Blue	0-255	Proportional control 0-100% of the Blue color

5.1 DMX functions AL2086/AL2088

Channel	Function	Value	Description
1	White	0-255	Proportional control 0-100%

6.0 Spare parts

All the components of the unit are available as spare parts at **Griven's** dealers. The exploded views, the wiring diagram, the electronic layout and the advertising brochure are available on request.

To make aftersale assistance easier, remember to specify the serial number and the model of the fixture which the spare parts are requested for.

7.0 Disposal

The European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE), requires that old lighting fixtures must not be disposed of the normal unsorted municipal waste stream. Old appliances must be collected separately in order to optimise the recovery and recycling of the materials they contain and reduce the impact on human health and the environment.



The crossed out "wheeled bin" symbol on the product reminds you of your obligation, that when you dispose of the appliance it must be separately collected.

Consumer should contact their local authority or retailer for information concerning the correct disposal of their old appliance.

8.0 Technical specifications

Mechanical features AL2076 AL2086 AL2088

Height	.97mm (3.8")
Length	.129mm (5")
Width	.128mm (5.08")
Weight	.052Kg (0.9Lbs)

Mechanical features AL2011

Height	.44mm (1.73")
Length	.252mm (9.92")
Width	.90mm (3.54")
Weight	.37Kg (8.1Lbs)

Thermal features

Maximum ambient temperature	-20°C (-4°F)
Maximum ambient temperature	.40°C (104°F)
Maximum surface temperature	<70°C (<158°F)

Electrical features

Power supply voltage	.48VDC
Maximum power	.13W

Light output source

Type of light output source	6 Led RGB (AL2076) / 6 LED W (AL2086 - AL2088)
-----------------------------	--

Optics

Optical system	180° semispheric opaline optics fixture
----------------	---

Control AL2076

Protocol	DMX-512 compatible
Control channel	3 channels

Control AL2086/AL2088

Protocol	DMX-512 compatible
Control channel	1 channel

Housing

Unit body	Aluminium and opaline polymer body
Treatment	Scratch resistant polyester paint
Weather protection rate	IP65



Via Bulgaria, 16 - 46042 CASTEL GOFFREDO (MN) - Italy
Telefono 0376/779483 - Fax 0376/779682 - 0376/779552
<http://www.griven.com/> e-mail griven@griven.com

User's manual release 2.30