



Dutch Lighting™
Innovations



DLI Converter
0-10V - RS485

User Manual
WWW.DLI.NL

Preface

Thank you for buying the DLI Converter. The DLI Converter is made with high quality components only to assure a high reliability, a long service life and safe operation.

For a correct installation, it is important to read the installation manual carefully before you start with the installation of the converter.

In this manual, the DLI Converter will be referred to as "the converter".

Introduction

Intended use

The converter can be used in installations which are using 0-10V signal to dim the fixtures. To convert this signal to a digital command, enable the DLI fixtures to dim accordingly.

The converter is intended to be used in combination with DLI fixtures. This installation manual explains how to install and use the converter with a dimming interface.

Read and understand this manual completely before installing and using the converter.

Using the converter otherwise than specified in this manual, is considered as unintended use and will void all warranty. Year of introduction is 2024.

1. LED indicator
2. On/off switch
3. USB-C charging port
4. RJ port signal out*
5. RJ port signal in*
6. Mounting bracket
7. USB charging cable
8. T splitter
9. USB power adapter EU-NA

* Only use cables supplied by DLI for connecting the fixtures.

Maximum allowed cable length from converter to last fixture 400 ft. Parallel lines are advised if more are connected.

The maximum amount of fixtures connected to the system is 600 pieces* depending on the cable length and possible interference due to external influence.

**Divided over 4 zones and 3 strings of 50 pieces per zone.*

Warning: make sure to wire fixtures according to our installation instructions. Scan the QR code for more information.



Warranty

Refer to the general terms and conditions of Dutch Lighting Innovations for information about the warranty conditions.

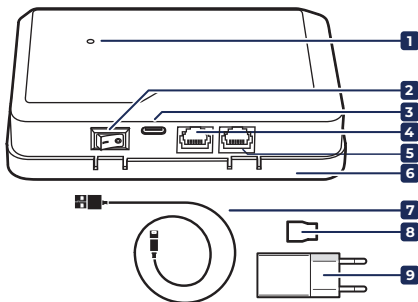
Liability

Any changes and/or modifications to the converter will void the warranty. We accept no liability for damage caused by improper use of the converter.

Product description

Description

The converter can be used to control fixtures.



Specifications

DLI Converter 0-10V - RS485			
Power supply	5.0V/1000mA	Weight (g)	120
Power consumption	1W	Operating ambient temperature range	0°C – 40°C
Battery type	18650	Relative humidity	0-95% at 25°C
Battery capacity*	2000mAh/3.7V	Warranty	3 years
Dimensions (mm)	130 x 80 x 31	!Max allowed 15V on the input signal, otherwise product will be damaged!	

*The controller can run 20 hours, depending on the number of fixtures without charging

Signal table

0-10V Signal	LED Dimming Level	HPS Dimming Level
0-2.75V	OFF	OFF
2.9V-3.2V	30%	No Response
3.3V-3.7V	35%	No Response
3.8V-4.2V	40%	No Response
4.3V-4.7V	45%	No Response
4.8V-5.2V	50%	No Response
5.3V-5.7V	55%	No Response
5.8V-6.2V	60%	60%
6.3V-6.7V	65%	65%
6.8V-7.2V	70%	70%
7.3V-7.7V	75%	75%
7.8V-8.2V	80%	80%
8.3V-8.7V	85%	85%
8.8V-9.2V	90%	90%
9.3V-9.7V	95%	95%
9.7V-12V	100%	100%

Safety

Warning!

- Read and understand this manual completely before installing and using the converter.
- Always observe the local rules for installing and using the converter.
- Always keep away from children and pets.
- Never open the converter. Danger of short-circuiting which pose a fire hazard.
- Never rewire, repair or reconfigure any component of the converter. Danger of short-circuiting which may pose a fire hazard.
- Never use the converter in a wet environment or outdoors. Danger of short-circuiting which may pose a fire hazard.

- Never use the converter in the proximity of dangerous or combustible materials. Danger of combustion which may pose a fire hazard.

Caution!

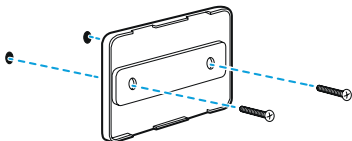
- Always connect the USB power cable properly.
- Always connect the RJ cable properly.
- Never use a damaged converter, power cable or power adapter. If the power cable is damaged, contact the manufacturer to receive a new power cable.
- Always use screws and plugs that are suited for your wall and that they have sufficient holding power. Contact your local specialised retailer if needed.

Installation

⚠ Caution!

– Always use screws and plugs that are suited for your wall and that they have sufficient holding power. Contact your local specialised retailer if needed.

1. Remove the bracket of the converter.
2. Hold the bracket against the desired place on the wall.
3. Mark the holes of the bracket on the wall.
4. Remove the bracket.
5. Drill the holes.
6. Insert plugs in the holes.
7. Fasten the bracket with screws. See image.
8. Insert the converter in the bracket.



Connecting the USB charging cable and the RJ cable

⚠ Caution!

– Always connect the USB power cable properly.

– Always connect the RJ cable properly.

1. Plug the USB charging cable into the USB power adapter.
2. Plug the other end of the USB charging cable into the converter.
3. Plug the USB power adapter into a power outlet.
4. Plug the RJ cable from the 0-10V device into the input RJ port of the converter.
5. Plug the RJ cable into the RJ output port of the converter.
6. Plug the other end of the RJ cable into a fixture.

1 Always use a DLI fixture in combination with the converter.

7. Connect more fixtures.
 - Use the RJ out port on the fixture to connect more fixtures.
 - Use the T splitter to connect more fixtures.

Contact

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Use

1. Switch the on/off switch to I to switch on the converter.
2. Set the 0-10V device to the desired settings.

Maintenance

⚠ Warning!

– Never open the converter. Danger of short-circuiting which pose a fire hazard. Check the converter regularly for dust or dirt. Clean the converter if necessary.

Disconnecting the USB charging cable and the RJ cable

1. Switch the on/off switch to 0 to switch off the converter.
2. Unplug the USB power adapter from the power outlet.
3. Unplug the RJ cable from the fixture.
4. Unplug the RJ cable from the RJ output port of the converter.
5. Unplug the RJ cable from the RJ input port of the converter.
6. Unplug the USB charging cable from the converter.
7. Unplug the USB charging cable from the USB power adapter.

Storage and disposal

Store the controller in a dry, dust-free and clean environment.

Store in a room with an ambient temperature between -40°C – 85°C and a relative humidity between 5% and 85%, non condensing.

This product should not be thrown away with other household waste. To prevent possible harm to the environment or human health by uncontrolled waste disposal, you are responsible for recycling it so that it can promote the sustainable reuse of raw materials. To return your used product, you can use the regular return and collection systems applicable in your country.