



Scan to view or download these instructions online

# LED PUCK WIRING INSTALLATION GUIDE

### **READ BEFORE START**

The following instructions are designed to help you ensure a safe and professional installation. Observe all the following steps.

You can also follow the instructions online. Scan the QR code above to view and download.

#### CONTENTS

This document contains 5 parts:

- 1. Warnings
- 2. LED Driver Distance Guide
- 3. Wiring Diagram
- 4. Wiring Installation Guide
- 5. M5 Connection Procedure
- 6. (Optional) IP67 Driver Box and Waterproofing

#### **EQUIPMENT CHECKLIST**

Some of the items you will need include:

- Electrical pliers
- Puck pliers (provided)
- Wire hook
- Cable Snake

#### **GENERAL NOTES**

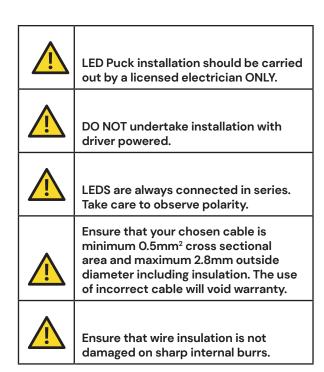
All LED Pucks are factory tested for a minimum of 24hrs.

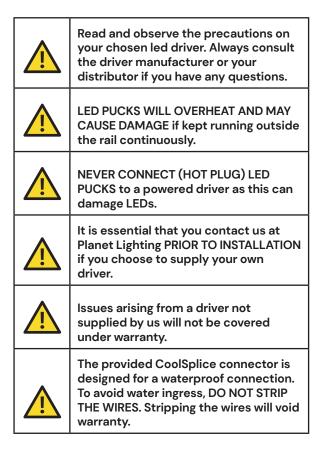


#### **WARNINGS**

#### CAUTION!

Please observe all of the following cautions.







Always use pliers. DO NOT STRIP THE WIRES. Ensure wire is pushed all the way into the connector.



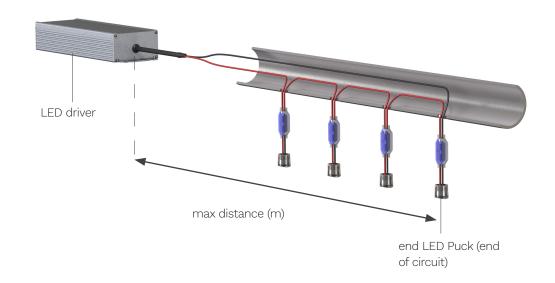
M5 Connection plugs must be aligned correctly before connecting. DO NOT FORCE THE PLUG. Follow the M5 connection procedure.



# RECOMMENDED DISTANCE BETWEEN LED DRIVER AND THE END LED PUCK

Observe this guide to avoid any significant voltage drops in the circuit. Note the relationship between the number of LED Pucks in the series, wire size, and distance between the end LED Puck (end of circuit) and the LED driver.

NOTE! Ensure that your chosen cable is minimum 0.5mm² cross sectional area and maximum 2.8mm outside diameter including insulation. Use of incorrect cable will void warranty.



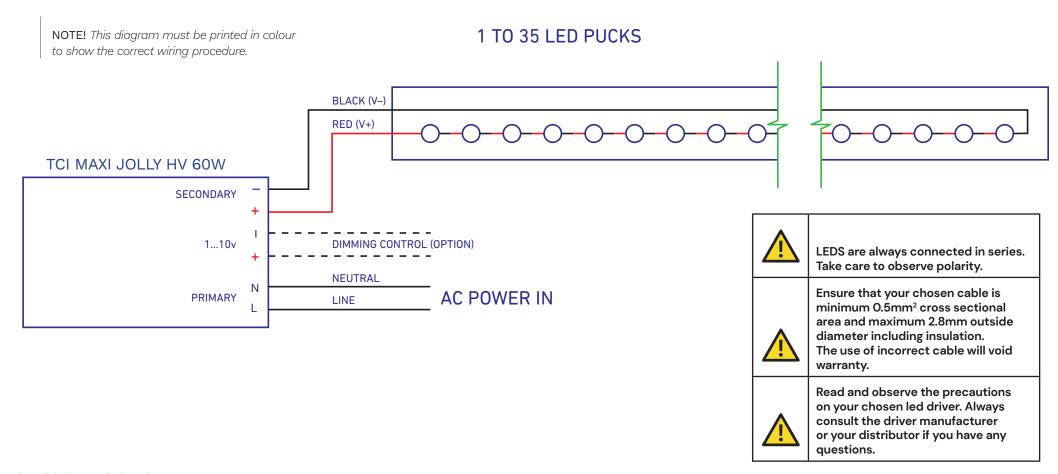
Number of Pucks in Series	Wire Size (mm²)	Max Distance (m) between end LED Puck and LED Driver
35	0.5	100
35	0.75	150
32	0.5	200
32	0.75	250

Table 1. The table above shows an example number of LED Pucks in a series with the distance between the end LED Puck and the driver without any significant voltage drop.



### **WIRING DIAGRAM**

LED Puck is connected in series. Take care to observe polarity.





### **INSTALLATION GUIDE**

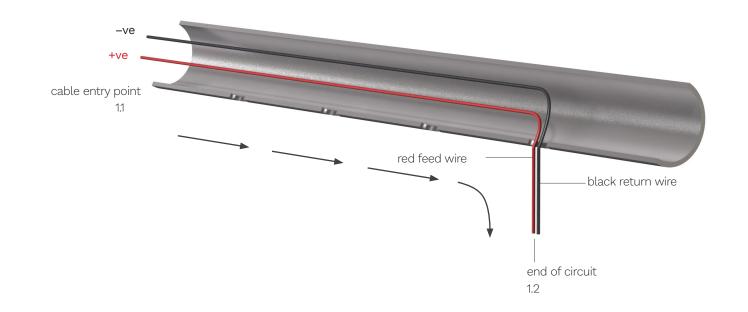
### 1. RUN THE CABLE

**1.1** Run red and black wire through the rail for the designated circuit as per wiring specifications.

**1.2** Pull both wires through the hole furthest from the cable entry point (this is the end of the circuit).

NOTE! In this guide, the red wire pictured here is referred to as the red feed wire. The back wire is referred to as the black return wire.

NOTE! Ensure that your chosen cable is minimum 0.5mm<sup>2</sup> cross sectional area and maximum 2.8mm outside diameter (including insulation)





Ensure that your chosen cable is minimum 0.5mm² cross sectional area and maximum 2.8mm outside diameter including insulation. The use of incorrect cable will void warranty.



Ensure that wire insulation is not damaged on sharp internal burrs.



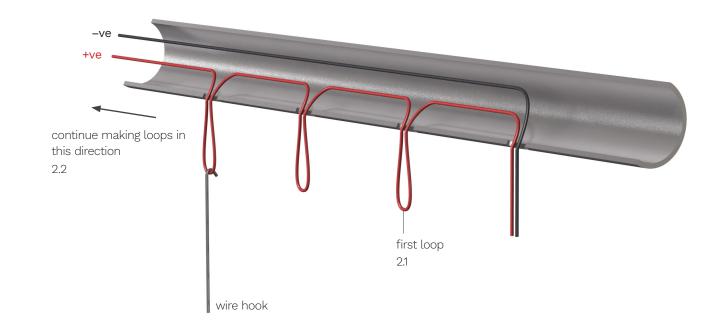
### 2. PULL RED WIRE LOOPS

2.1 At the last hole before the end of circuit, use a wire hook to gently pull out 100mm length of red feed wire from the hole to create your first loop. Tape the loop temporarily to outside of rail to prevent it being pulled back in.

**2.2** Repeat above step (2.1) for each hole taking care to not pull the previous loop back into the tube.

**NOTE!** Ensure there is extra red wire available as every hole will require 100mm of loop pulled through.

TIP! Use a hook made from stiff wire to gently pull the red loops through the holes.





#### 3. CONNECT PUCKS

- 3.1 Cut red loop wire protruding from hole.
- **3.2** Using the provided CoolSplice connectors, connect the black wire from the LED Puck to the red feed wire which leads towards end of circuit.

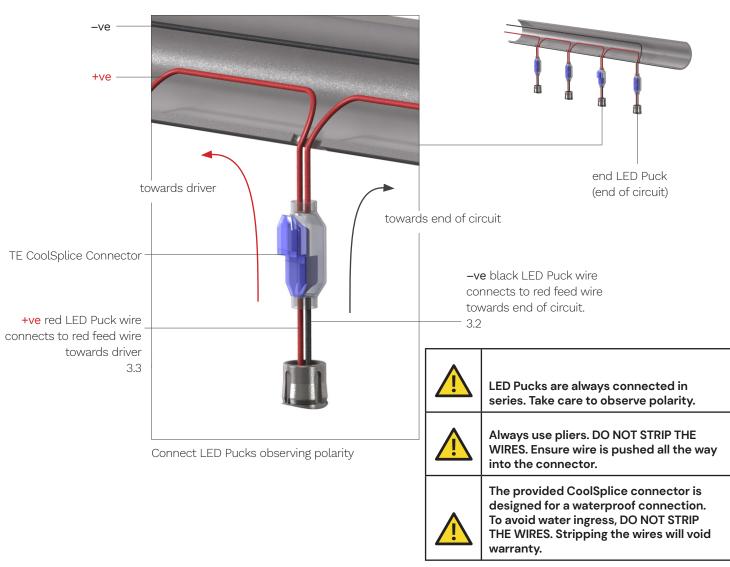
NOTE! Check that you have the correct wire by gently pulling on the red feed wire to trace the direction of the cable.

- **3.3** Connect the red LED Puck wire to the red feed wire leading towards driver.
- **3.4** Repeat above steps (3.1 3.3) for all remaining pucks EXCEPT the end LED puck at the end of circuit (see next step).

**NOTE!** LED Pucks are always connected in series. Take care to observe polarity.

NOTE! Always use pliers. Do not strip the wires. Ensure wire is pushed all the way into the connector

NOTE! The provided CoolSplice connector is designed for a waterproof connection. To avoid water ingress, DO NOT strip the wires. Stripping the wires will void warranty.

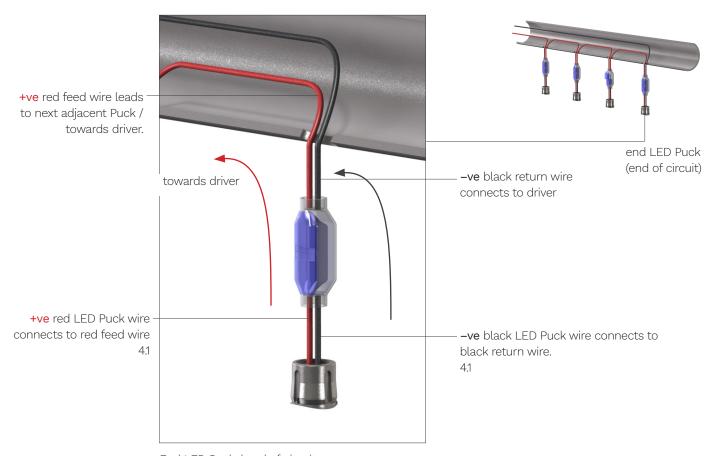




## 4. CONNECT THE END LED PUCK

**4.1** Connect the end LED Puck in the series as follows:

- The red wire on the LED Puck connects to the red feed wire.
- The black wire on the LED Puck connects to the black return wire (leading back to driver).



End LED Puck / end of circuit



#### 5. CHECK TEST THE SYSTEM

NOTE! This step requires TEMPORARILY connecting the driver to confirm the system is working correctly. Please ensure you observe your driver's safety precautions and operating instructions.

#### **5.1** Connect the driver as follows:

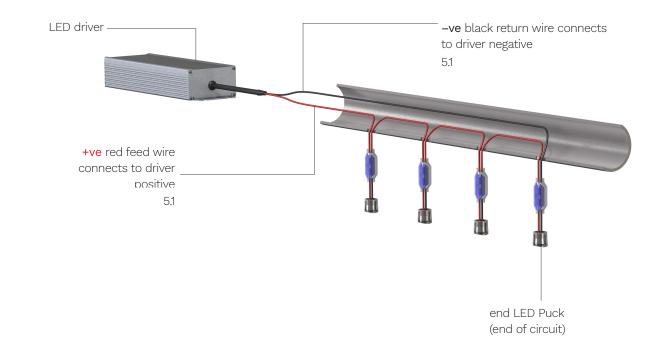
- Connect the driver positive (+) output to the red feed wire.
- - Connect the drive negative (-)output to the black return wire.

#### **5.2** Apply power to the driver.

**5.3** Check that ALL the LED Pucks are illuminated. Ensure that you only run the Pucks for a brief duration — 2 to 3 minutes maximum — to test illumination only.

5.4 Disconnect power and proceed to next step.

NOTE! DO NOT continuously run the LED pucks outside the rail. ONLY power the Pucks for a brief duration (2-3 minutes maximum) to test illumination.





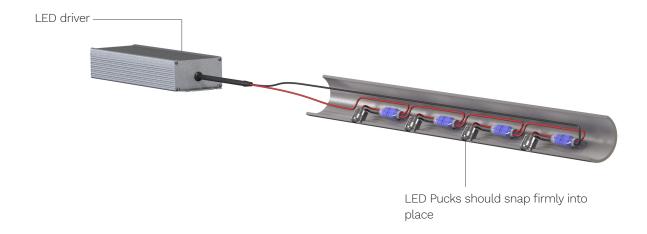
LED PUCKS WILL OVERHEAT AND MAY CAUSE DAMAGE if kept running outside the rail continuously.



## 6. INSERT LED PUCKS

**6.1** Push the LED Pucks into the tube. The Pucks should snap into place firmly and securely.

**6.2** Ensure correct alignment of LED Pucks. If not use the provided Puck pliers to align correctly, taking note to avoid scratching the lens.





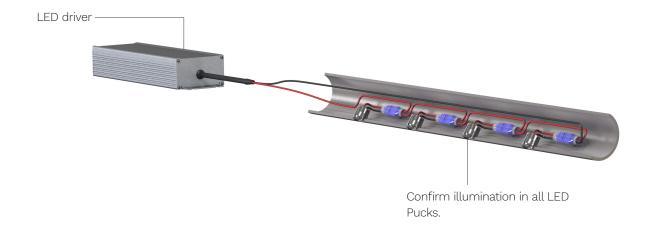
### 7. CONFIRM SYSTEM IS WORKING

7.1 Apply power to the driver.

7.2 Check that ALL LED Pucks are illuminated.

With the LED Pucks now installed securely within the handrail, the system is ready for extended operation.

**NOTE!** Please ensure you observe your driver's safety precautions and operating instructions.





Read and observe the precautions on your chosen led driver. Always consult the driver manufacturer or your distributor if you have any questions.

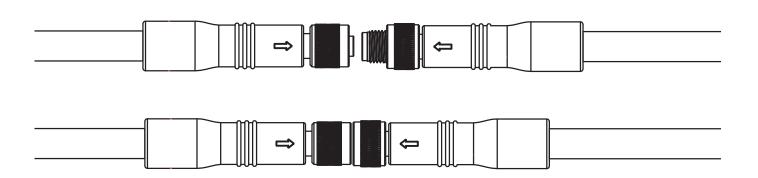


### **M5 CONNECTIONS**

For installations that require M5 connections, please follow the correct M5 connection steps below.

#### CORRECT M5 CONNECTING PROCEDURE

- 1. Align the arrows as shown.
- 2. Gently connect the connectors with light finger pressure only, if there is any resistance, check arrow alignment do not force!
- 3. Gently screw together the threaded sleeve with light finger pressure only.
- 4. Test that the connection is screwed in place by gently pulling the connectors apart.



M5 Connectors must be aligned properly before connecting.



M5 connection plugs must be aligned correctly before connecting.
DO NOT FORCE THE PLUG. Follow the M5 connection procedure.