

encelium 0-10V Connected Lighting Module



encelium 0-10V Connected Lighting Module Instruction Manual

[Home](#) » [ENCELIUM](#) » encelium 0-10V Connected Lighting Module Instruction Manual 

Contents

- 1 encelium 0-10V Connected Lighting Module
- 2 Product Information
- 3 Product Usage Instructions
- 4 GETTING STARTED
- 5 PRODUCT SAFETY
- 6 WIRELESS SYSTEM OVERVIEW
- 7 Installation Instructions
- 8 FAQ
- 9 Documents / Resources
 - 9.1 References

ENCELIUM

encelium 0-10V Connected Lighting Module



Product Information

Specifications

- **Product Name:** Connected Lighting Module (CLM)
- **Type:** Wireless device for individual luminaire control
- **Designed for:** Adding flexibility to building managers
- Reduces electrical contractor labor hours during installation
- **Integration:** Easily integrated into the Encelium X LightingControl System
- **Mounting:** Fits NEMA standard PG-7 (0.5 inch) knockout

Product Usage Instructions

Mounting the CLM

To mount the CLM in the luminaire

1. Use the provided mounting clips to secure the CLM in place.
2. Ensure the diameter of the opening is between 21.82 to 23.01 mm (0.85 to 0.9 inches).
3. Do not wire the CLM before installing it in the knockout.

Wiring Instructions

Follow these steps for wiring the CLM:

- Ensure proper insulation and wire thickness.
- Use wires with a thickness of 2.23 mm (0.09 inch) to avoid connection issues.
- Refer to the provided diagram for wiring connections with LED drivers.

Functional Test

An End-of-Line Functional Test will automatically be performed when the CLM is powered up. This test confirms power reception and communication of dimming signals to the driver.

GETTING STARTED

OVERVIEW

The Connected Lighting Module (CLM) is a wireless device designed to easily add individual luminaire control to spaces, delivering the ultimate flexibility to building managers. The Encelium CLM design significantly reduces electrical contractor labor hours during the on-site installation. For more information on product specifications and design tools visit encelium.com.

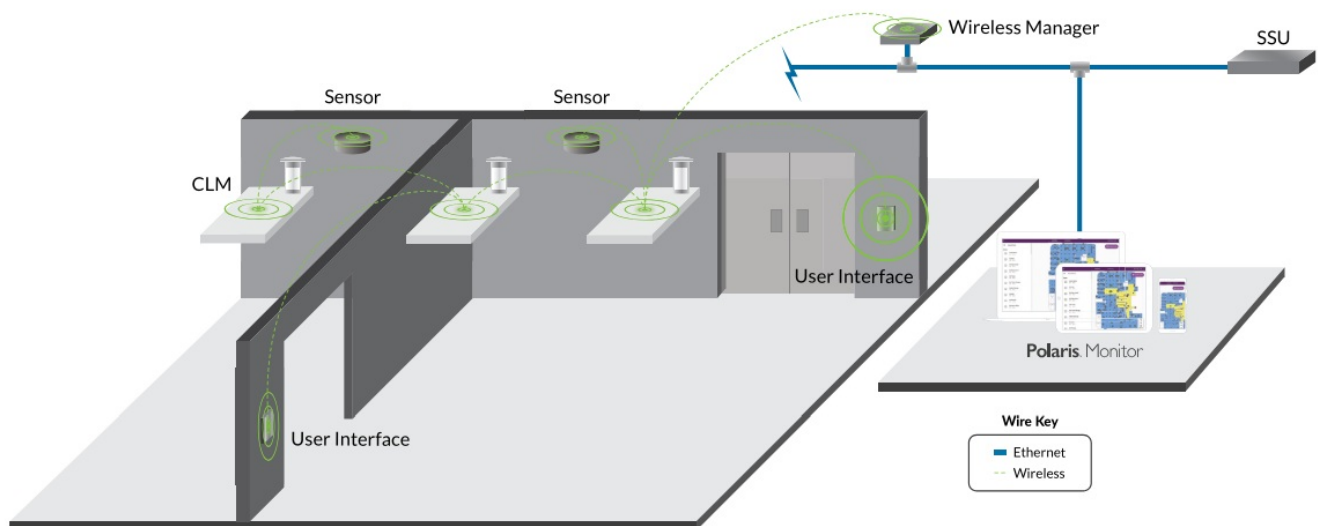
PRODUCT SAFETY

READ THESE INSTRUCTIONS BEFORE USING THE PRODUCT

- When using electrical equipment, basic safety precautions should always be followed, including the following:
- Do not mount near gas or electric heaters or let power supply cords touch hot surfaces.
- Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- The use of accessory equipment is not recommended by Encelium as it may cause an unsafe condition.
- All DALI channels are internally connected together to the control unit. Make sure to consider this when installing.
- Do not use this equipment for other than the intended use.

SAVE THESE INSTRUCTIONS

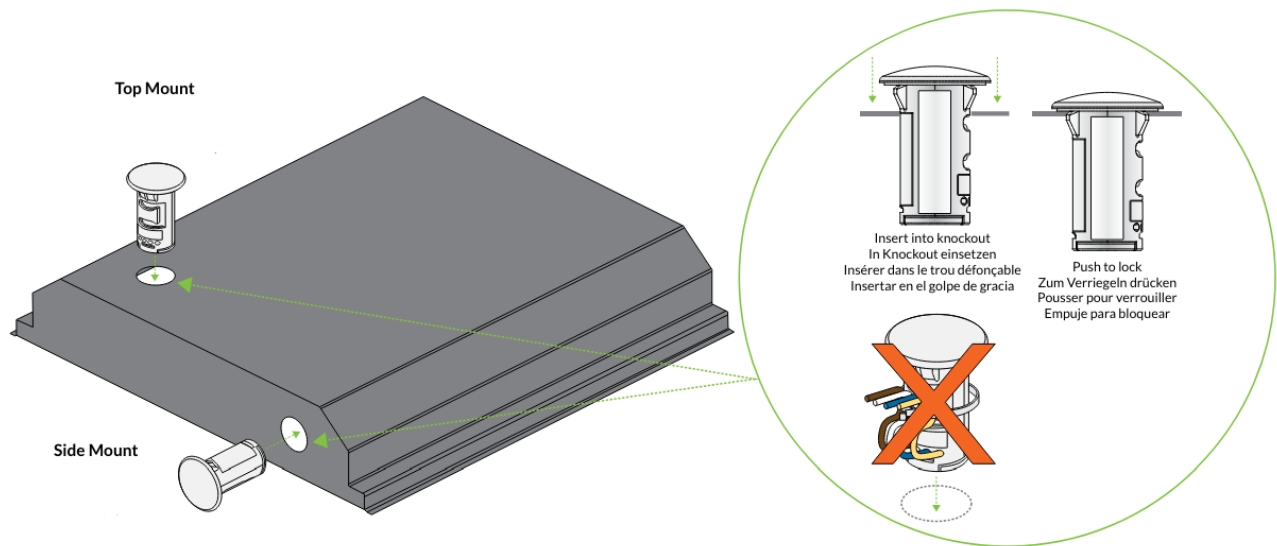
WIRELESS SYSTEM OVERVIEW



This illustration shows how each component is easily integrated into the Encelium X Lighting Control System.

Installation Instructions

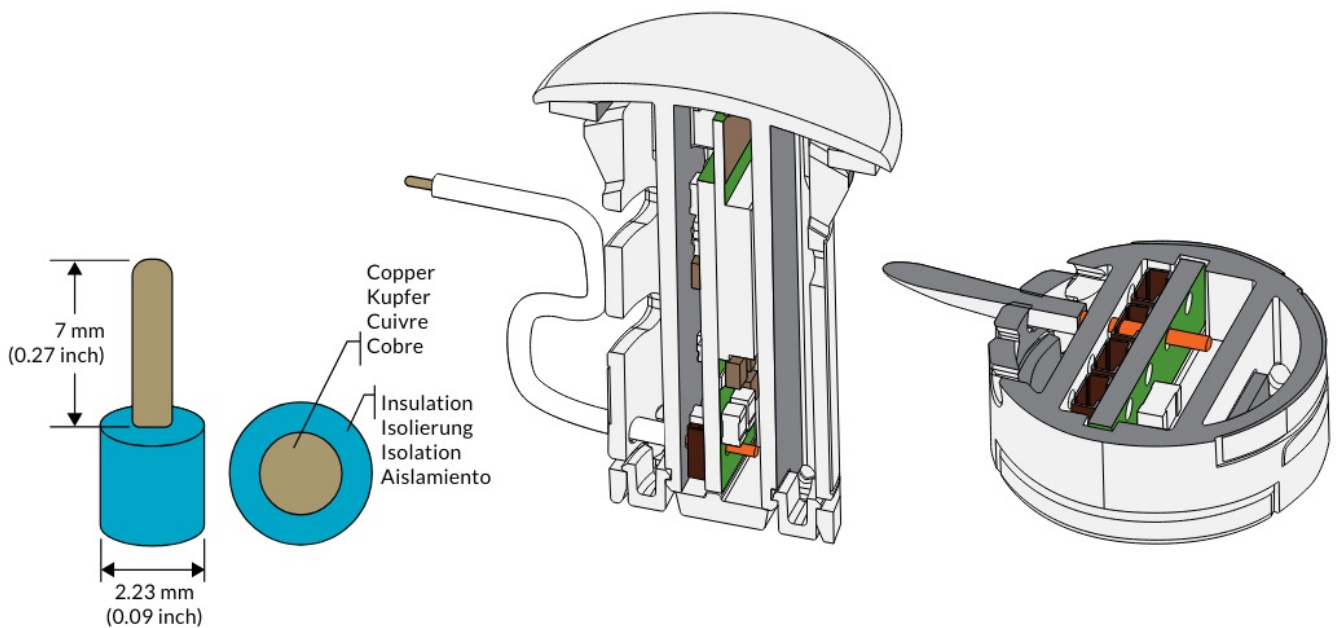
STEP 1: LUMINAIRE MOUNT



Mount CLM in the luminaire (or mounting plate) through the NEMA standard PG-7 (0.5 inch) trade size knockout. The attached mounting clips will hold the CLM firmly in place. The diameter of the opening must be 21.82 to 23.01 mm (0.85 to 0.9 inches).

Note: Do not wire the CLM first before installing it in the knockout. The space will not be sufficient to successfully install the unit.

STEP 2



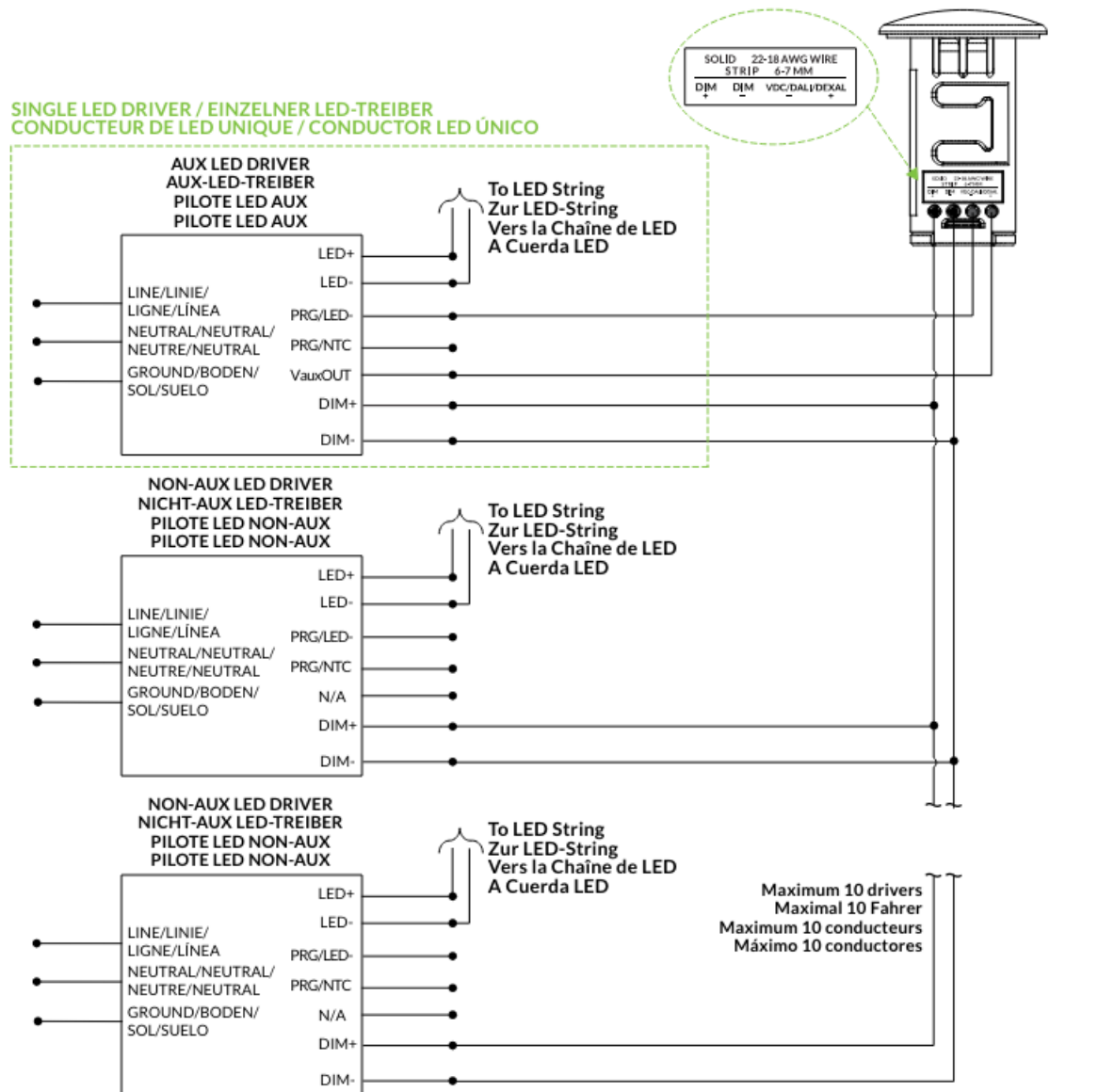
Using wire between 18–22 AWG (maximum total diameter of 2.23 mm (0.09 inch), which includes copper and insulation), strip a length of 7 mm (0.3 inch). Tolerance ± 0.5 mm (± 0.02 inch). Insert the wires through the terminals and push them until the insulation passes through the CLM body and hits the inside layer of the CLM assembly. This step is critical to ensure the wires engage in the terminal blocks.

Note: Using a wire with a higher thickness will cause insufficient connection.

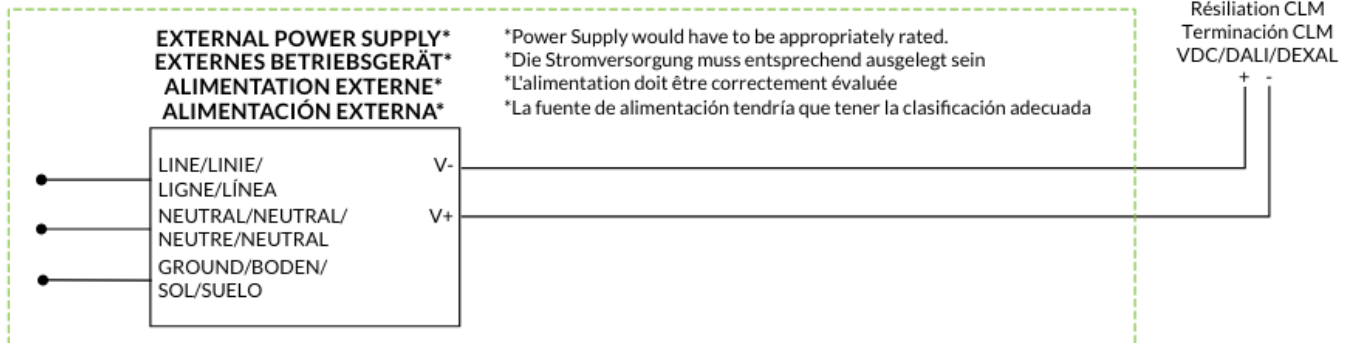
STEP 3: MAKE ELECTRICAL CONNECTIONS

0-10V LED Driver Wiring Diagram

Note: The LED Driver must have dim to off enabled.



EXTERNAL POWER SUPPLY / EXTERNE STROMVERSÖRGUNG ALIMENTATION EXTERNE / FUENTE DE ALIMENTACIÓN EXTERNA

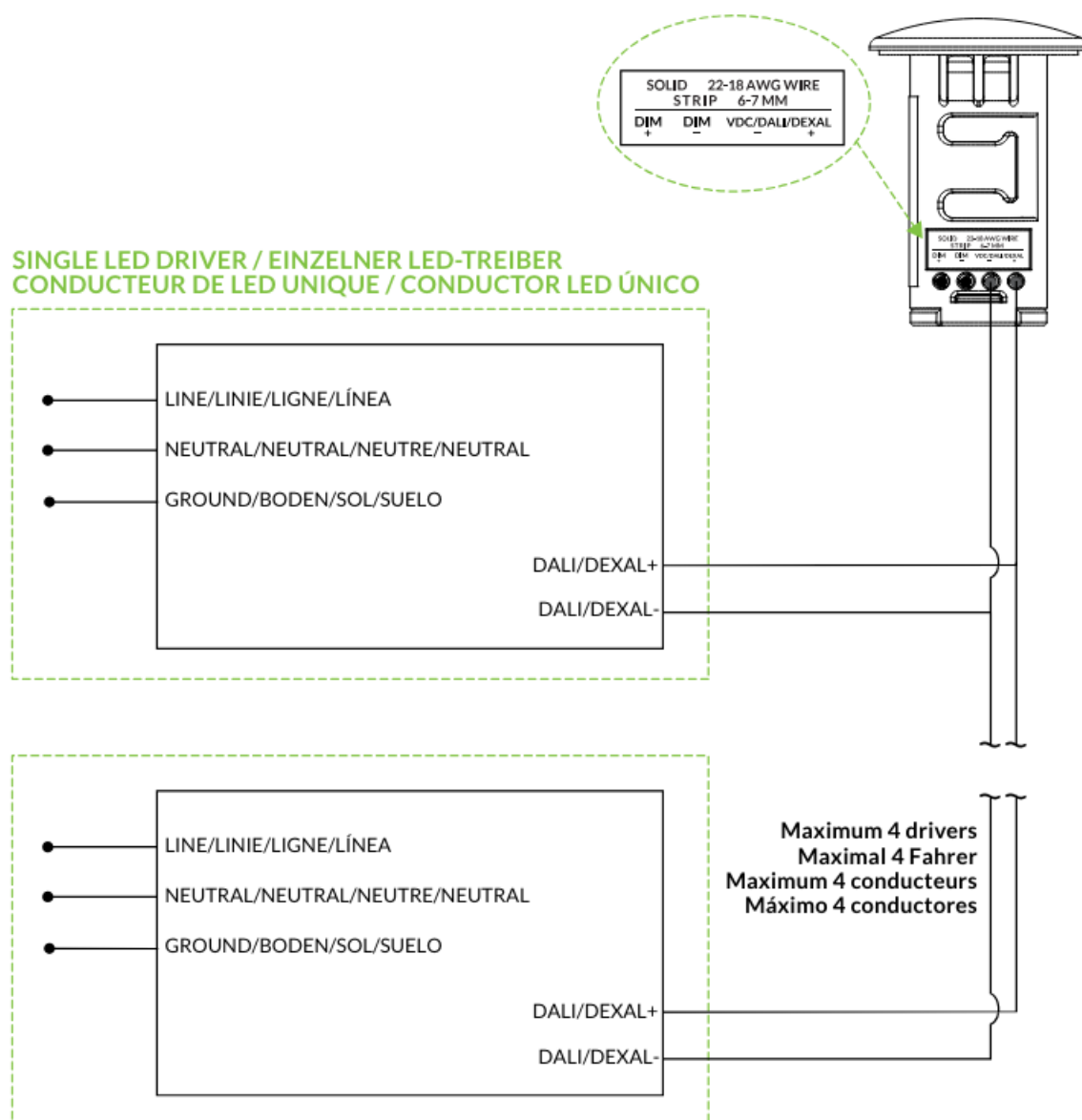


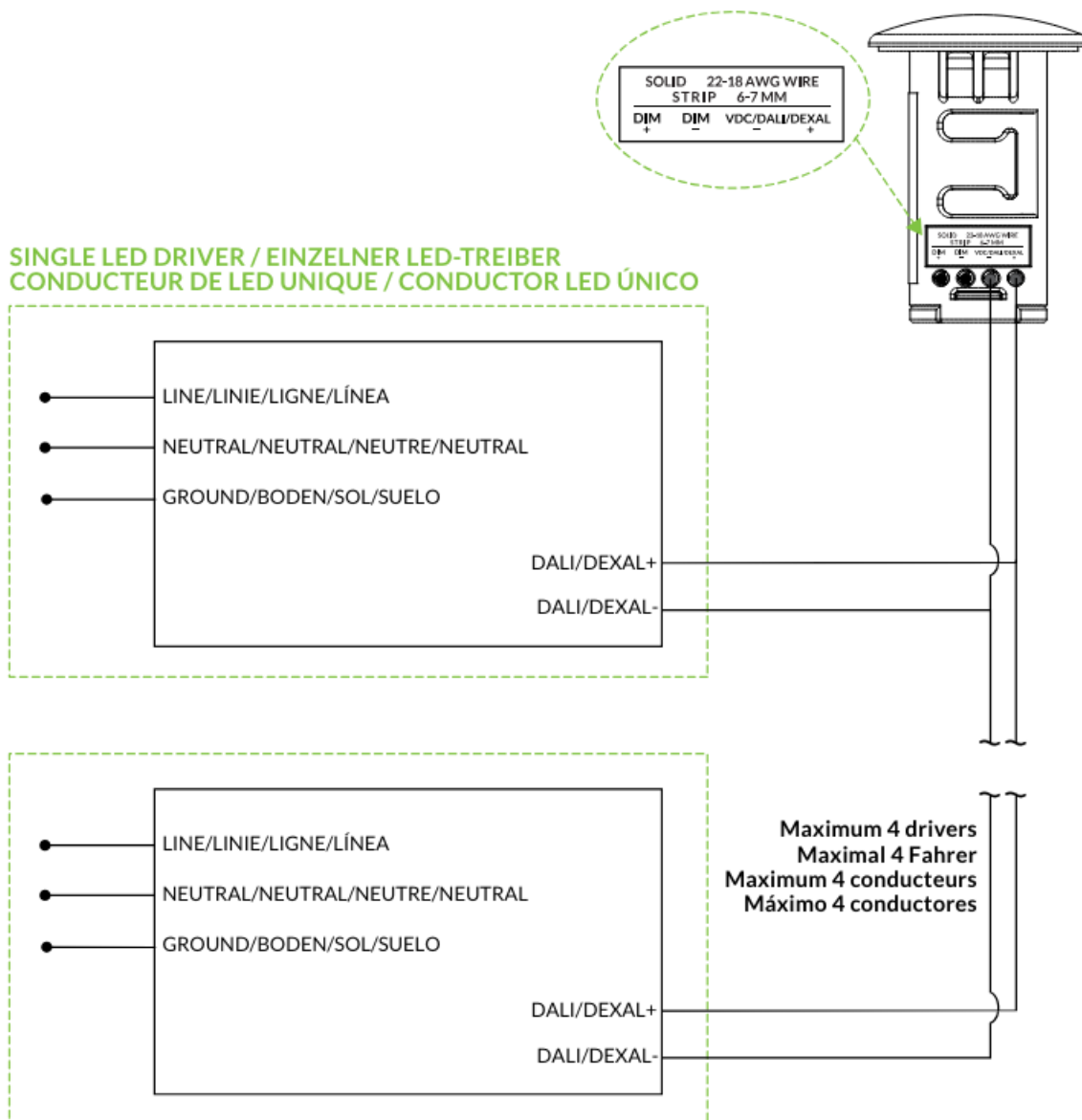
External Power Supply is used **ONLY** if all drivers are NON-AUX.
Eine externe Stromversorgung wird **NUR** verwendet, wenn alle Treiber NICHT-AUX sind.
L'alimentation externe est utilisée **UNIQUEMENT** si tous les pilotes sont NON-AUX.
La fuente de alimentación externa se usa **SOLAMENTE** si todos los controladores **NO** son AUX.

Proceed to Step 4 if you are not connecting a 0-10V LED Driver.

STEP 4

Note: DEXAL is a DALI Driver with a Self-Powered DALI Link



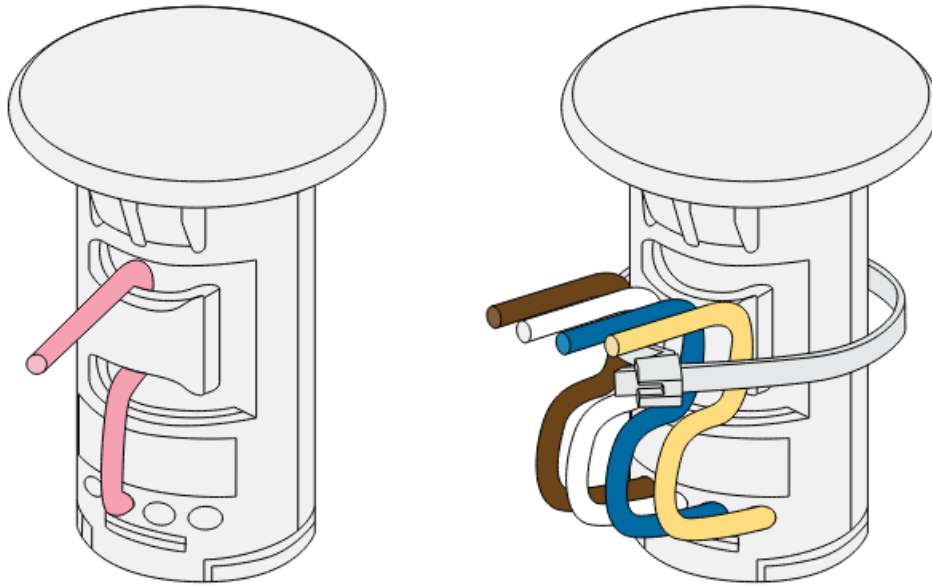


Proceed to Step 5 if you are not connecting a DALI /DEXAL/Tuneable White LED Drivers.

END-OF-LINE (EOL) TESTING | END-OF-LINE (EOL)-TESTS

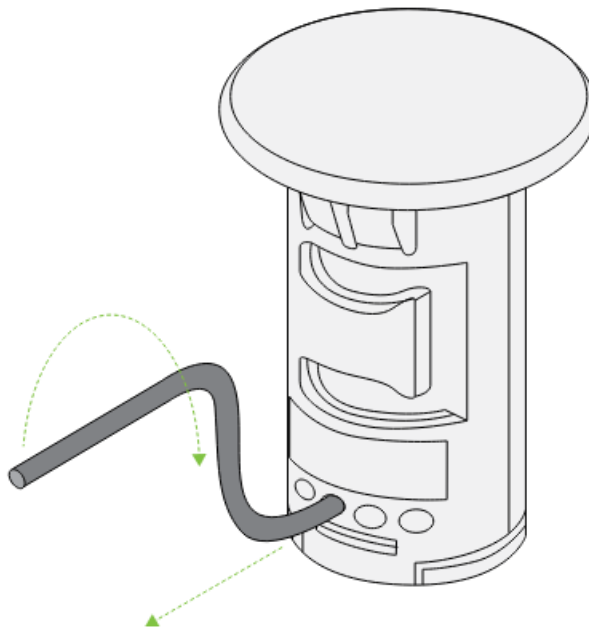
A End-of-Line Functional Test will automatically be performed (the first 10 times) when the CLM is powered up. When power is applied, the luminaire will cycle from 100% to Off 2 to 3 times. This confirms that the module is receiving power and can communicate the dimming signals to the driver. Additionally, if connected to a Tunable White Driver, following the blinking, the luminaire will set the color to cool white (e.g. 6500 K) then to warm white (e.g. 2700 K) then the default colour. The Wiring Test Tool (EN-WTT-ZB) can also be used to initiate a test sequence prior to commissioning. This would indicate that the CLM is wired correctly and ready to be paired to a wireless network. For more information, please refer to the Wiring Test Tool User Guide.

STEP 6



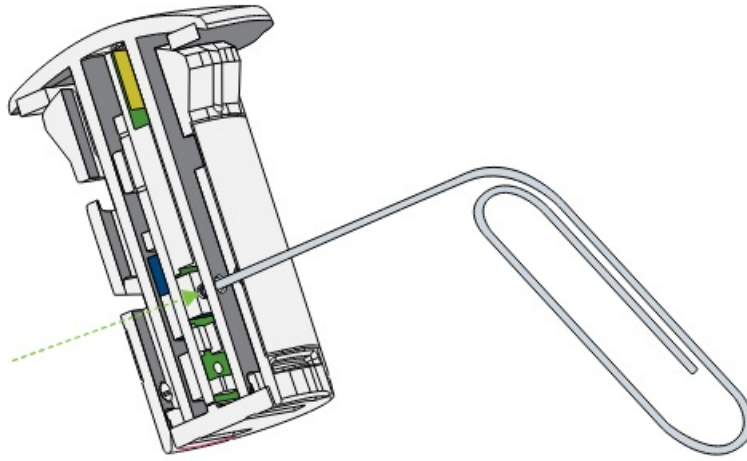
To ensure a reliable connection of the wires in the terminals, use the built-in strain relief (for 20–22 AWG) or a zip tie.

REWIRING



To rewire the CLM, first cut the wires, leaving 25.4 to 50.8 mm (1 to 2 inches). Carefully rotate the wire (clockwise or counter-clockwise) while pulling backwards to remove. The CLM can only be rewired a maximum of 2 times, after which the strength of the terminals is weakened. Repeated attempts can permanently damage the terminals.

RESETTING



Pressing the reset button for 5 seconds resets the product to the factory default state where the product removes group membership, binding table, and sets any persistent attributes to their default values.

Note: The CLM must be powered up while being reset manually.

THIS PAGE IS INTENTIONALLY LEFT BLANK

encelium.com

Copyright 2023 Legrand All Rights Reserved.

FAQ

Q: Can I use the CLM with more than 10 drivers?

A: No, the CLM supports a maximum of 10 drivers for proper functionality.


Q: What should I do if the luminaire does not cycle during power-up?

A: Ensure proper power supply and connections. If issues persist, consult the user manual or contact customer support.


Q: Is it safe to mount the CLM near heating sources?

A: No, avoid mounting the CLM near gas or electric heaters to prevent potential hazards.

Documents / Resources

	<p>encelium 0-10V Connected Lighting Module [pdf] Instruction Manual 0-10V Connected Lighting Module, 0-10V, Connected Lighting Module, Lighting Module, Modul e</p>
---	--

References

-  [Encelium - Exceptional Lighting Management](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.