

Installation instruction

Micro BLC Industrial DALI



The Mymesh micro BLC industrial DALI is a product in the Chess program for building light control. The micro BLC industrial DALI is a wireless light controller for Industrial LED DALI drivers. The micro BLC industrial DALI is powered by the DALI controller or by an auxiliary power supply.

Safety



- Installation and service should be performed by qualified personnel only.
- The electrical installation must be in conformance with the national legislation and relevant standards.
- Do not use the micro BLC industrial DALI if it is damaged.
- Do not screw the micro BLC industrial DALI too tight, as the material might break under high pressure

Application

Refer to the micro BLC industrial DALI product sheet (see chess.nl) for the environmental conditions.

Antenna mounting

The micro BLC industrial DALI contains an internal antenna for wireless communication with other Mymesh products. Operation of the antenna should not be disrupted.

- Do **not** mount the micro BLC industrial DALI inside a metal housing or directly next to a large metal object.
- Some glass and plastic materials such as safety glass, tinted glass and double glass influence the operation of an antenna.
- Use a plastic, polycarbonate or fiberglass housing **without** carbon
- Mount the micro BLC industrial DALI **outside** the fixture if necessary.
- Depending on the installation of the micro BLC industrial DALI in the luminaire the range is damped to a greater or lesser extent. The range of the antenna is divided into four categories:
 - ★★☆☆ – 75 to 100% antenna range for situations where luminaires are installed far apart in an open space (approx. 30-50 meters) **OR** for situations where luminaires are installed in close proximity (approx. 20-30 meters) in complex buildings with a lot of attenuation through walls, partitions and ceilings
 - ★★☆☆ – 50 to 75% antenna range is acceptable for situations where luminaires are installed in close proximity (approximately 10-20 meters) in buildings with limited attenuation due to partitions.
 - ★☆☆☆ – 25 to 50% antenna range is acceptable for situations where luminaires are installed in an open space in close proximity (approximately 10-20 meters).
 - ☆☆☆☆ – no antenna range. Do not apply.
- The following installation examples of the antenna are for illustrative purposes. Contact Chess in case of doubt.

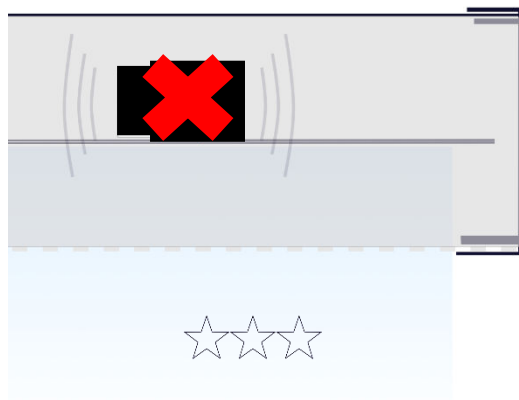


Figure 1: Do not place the micro BLC industrial DALI in a metal housing / fixture.

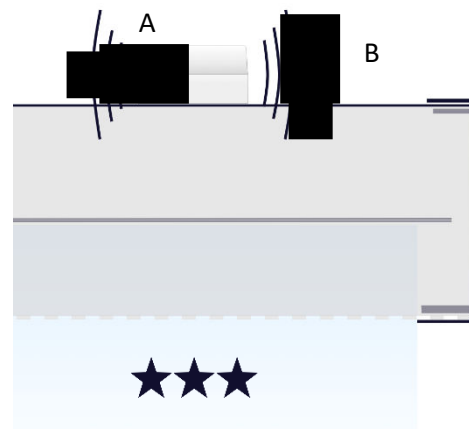


Figure 2: Place the micro BLC industrial DALI outside a metal housing / fixture.



Figure 3: In case of a metal fixture place the micro BLC industrial DALI on the side of the light diffuser.

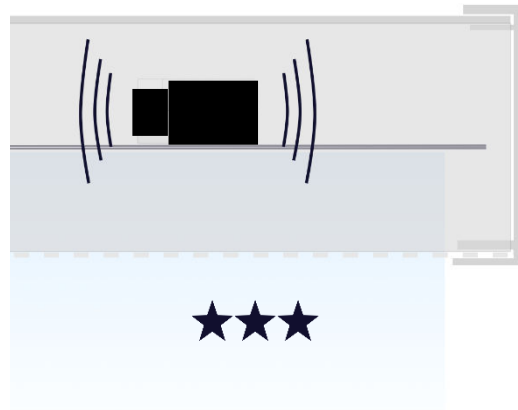


Figure 4: Place the micro BLC industrial DALI in a full plastic housing / fixture.



Figure 5: Do not place the micro BLC industrial DALI in a metal housing / junction box.



Figure 6: Place the micro BLC industrial DALI in a full plastic housing / junction box.



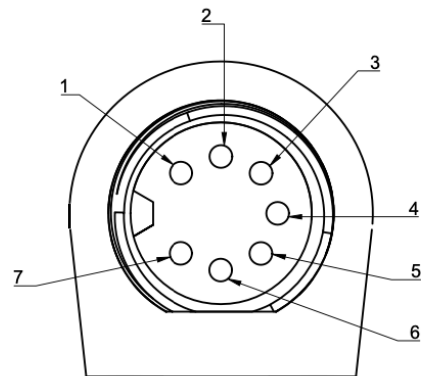
Installation

Mount the micro BLC industrial DALI on a flat surface using the mounting holes.

- The micro BLC industrial DALI can be wired in two configurations: powered by a DALI driver provided with an auxiliary power supply or by an external auxiliary power supply. See wiring diagrams below.
- Use the supplied connector.
- Do **not** connect drivers with **common mode chokes** to the micro BLC industrial DALI. Contact Chess in case of doubt.
- One micro BLC industrial DALI controls **one** luminaire.

Wiring diagrams

Pin	Description
1	Vaux (12V or 24V DC)
2	GND
3	Do not use
4	Do not use
5	D-
6	Do not use
7	D+

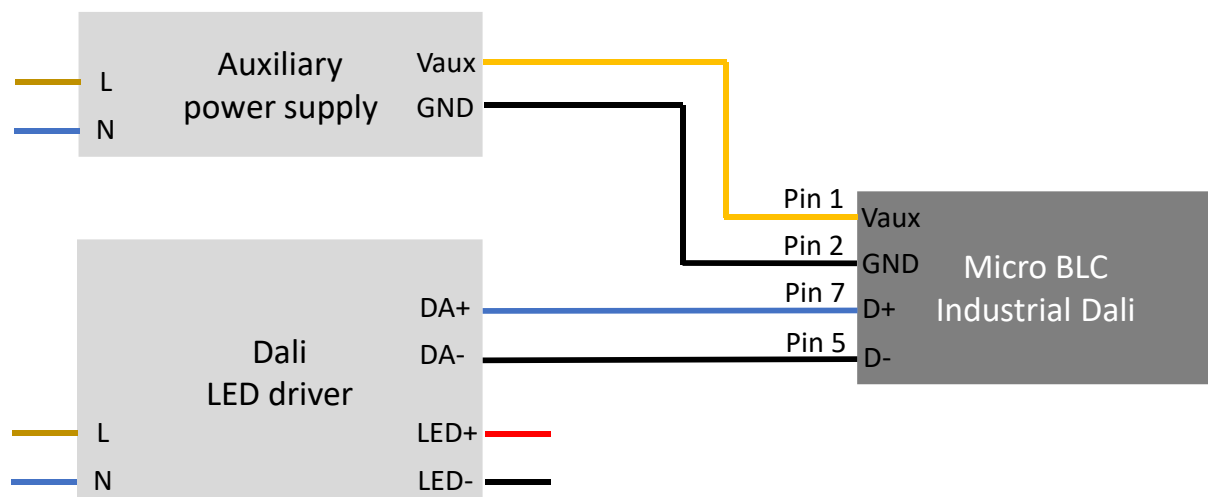


Micro BLC industrial DALI connector layout
(bottom view)

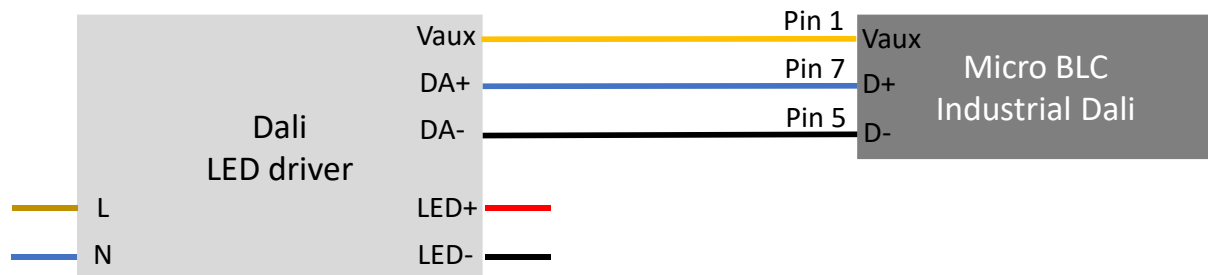
Warning: auxiliary power supplies should be connected to the Vaux input (never to the D+ input).

The micro BLC industrial Dali should always be powered using the Vaux input. This can either be done by an external auxiliary power supply or a Dali LED driver with an auxiliary power output. The micro BLC industrial Dali provides power to the Dali bus. Therefore it can be connected to Dali LED drivers with and without integrated bus power supply. The diagrams below show the two possible configurations.

DALI driver and external auxiliary power supply



DALI driver with internal auxiliary power supply



Configuration

When the micro BLC industrial DALI is powered, the connected lamp should go on. Use the iPad Mymesh commission app for configuration of the micro BLC industrial DALI.

The micro BLC industrial DALI is shown in the commission app with a combined lamp/sensor symbol. Installation and configuration of an add-on motion sensor will be described in a future version of this document.



Usage

The micro BLC industrial DALI will control the connected driver and lamp.

Compliance



This product complies with the European directives and relevant standards for RED, REACH and RoHS. The micro BLC industrial DALI contains a 2.4 GHz radio. The applied frequency of the radio is within the band 2.401 – 2.482 GHz and the maximum transmit power is +4 dBm.

Hereby, Chess Wise declares that the radio equipment type micro BLC industrial DALI is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity will be available at chess.nl.

Repair

Do not open this product. In case of failure the micro BLC industrial DALI must be replaced.



Recycling

Do not dispose this product as household waste but bring it to an appropriate collection point for recycling.