Installation instruction

Micro BLC 0-10V Industrial

The Mymesh micro BLC 0-10V industrial is a product in the Chess program for building light control. The micro BLC 0-10V industrial is a wireless light controller for 0-10V LED drivers. The micro BLC 0-10V industrial is powered by an auxiliary power supply of the 0-10V driver or by an external 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 0-10V industrial if it is damaged.

Application

Refer to the micro BLC 0-10V industrial product sheet (see chess.nl) for the environmental conditions.

Installation

Mount the micro BLC 0-10V industrial on a flat surface using the mounting holes.

- The micro BLC 0-10V industrial can be wired in two configurations: powered by an auxiliary power supply of the 0-10V driver or by an external power supply. See wiring diagrams below.
- One micro BLC 0-10V industrial controls **one** luminaire.

Product mounting

The micro BLC 0-10V industrial 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 0-10V industrial 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 0-10V industrial **outside** the fixture if necessary.
- Depending on the installation of the micro BLC 0-10V industrial 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.

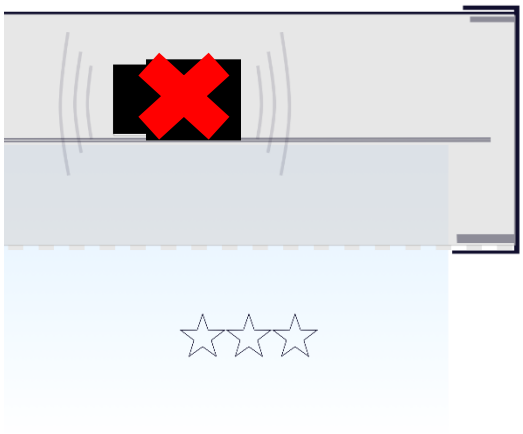


Figure 1: Do not place the micro BLC 0-10V industrial in a metal housing / fixture.

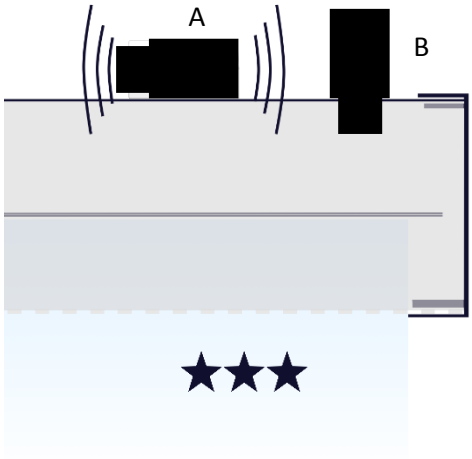


Figure 2: Place the micro BLC 0-10V industrial outside a metal housing / fixture.

Figure 3: In case of a metal fixture place the micro BLC 0-10V industrial on the side of the light diffuser.

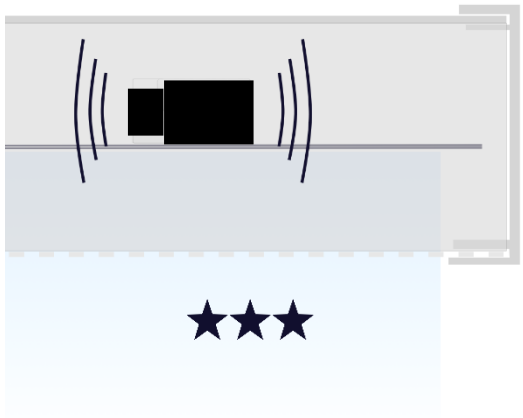


Figure 4: Place the micro BLC 0-10V industrial in a full plastic housing / fixture.

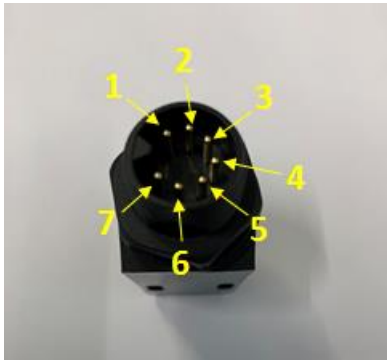
Figure 5: Do not place the micro BLC 0-10V industrial in a metal housing / junction box.

Figure 6: Place the micro BLC 0-10V industrial in a full plastic housing / junction box.

Wiring diagrams

The micro BLC 0-10V industrial is powered by an auxiliary power supply of the 0-10V driver or an external power supply. Use the supplied connector. Do **not** connect drivers with **common mode chokes** to the micro BLC 0-10V industrial. Contact Chess in case of doubt.

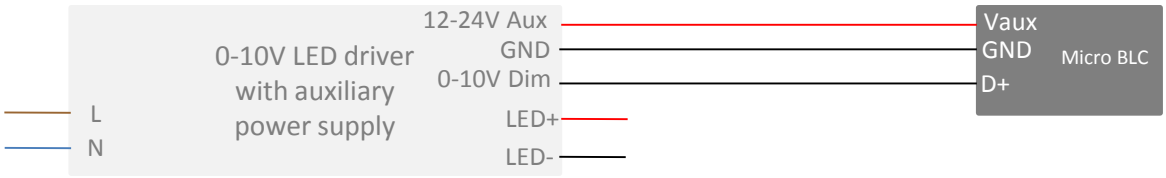
Pin	Description
1	Vaux (12V or 24V DC)
2	GND
3	Do not use
4	Do not use
5	Do not use
6	Do not use
7	D+ (0-10V Dim)



Micro BLC 0-10V industrial top view

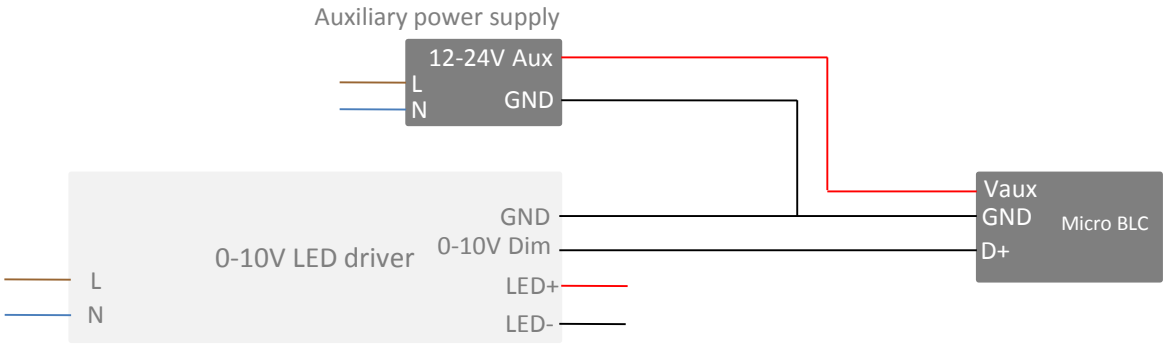
Option 1: 0-10V driver with integrated auxiliary power supply

The micro BLC 0-10V industrial can be connected to a 0-10V driver with integrated always-on auxiliary power supply.



Option 2: 0-10V driver with external auxiliary power supply

To connect a micro BLC 0-10V industrial to a 0-10V dimmable driver, the micro BLC 0-10V industrial must be powered by an external power supply.



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

Configuration

When the micro BLC 0-10V industrial is powered, the connected lamp should go on. Use the iPad Mymesh commission app for configuration of the micro BLC 0-10V industrial.

The micro BLC 0-10V industrial 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 0-10V industrial will control the connected driver and lamp.

Compliance

CE

This product complies with the European directives and relevant standards for low voltage, EMC, RED, REACH and RoHS. The micro BLC 0-10V industrial contains a 2.4 GHz radio. The applied frequency of the radio is within the band 2.401 – 2.483 GHz and the maximum transmit power is +4 dBm.

Hereby, Chess Wise declares that the radio equipment type micro BLC 0-10V industrial 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 0-10V industrial must be replaced.

Recycling

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