

# Installation instruction

## mini BLC DALI



The Mymesh mini BLC DALI is a product in the Chess program for building light control. The mini BLC DALI is a wireless light controller for DALI drivers.

### 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.
- The mains connection of the mini BLC DALI must be provided with a fuse or circuit breaker.
- Disconnect power at the source before installation, inspection or removal.
- Do not use the mini BLC DALI if it is damaged.



- The mini BLC DALI is suitable for use at indoor locations (IP20 protection class). Mount the mini BLC DALI in an IP66 housing for use at outdoor locations.
- The mini BLC DALI is double insulated (protection class II).
- The optional strain relief mini BLC can be used to fixate and protect wiring to the mini BLC DALI.



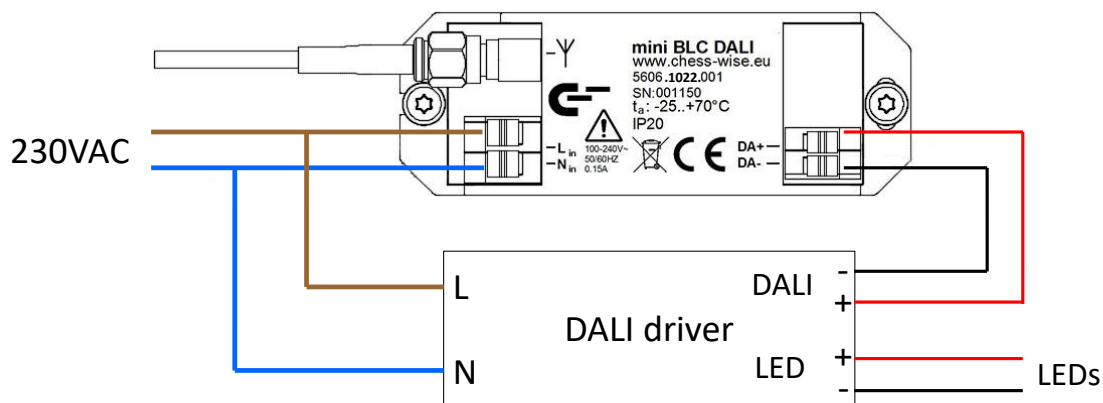
## Application

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

## Installation

- Install the mini BLC DALI in the direct neighborhood of other Mymesh products.
- Mount the mini BLC DALI with 2x M3 screw/bolt (76 mm distance) or double sided tape.
- Use maximal 1.5 mm<sup>2</sup> (AWG16) wiring for all connections. Push the wires completely into the terminal block. Use wire end sleeves when using flexible wires.
- Connect the 230VAC supply voltage to the mini BLC DALI and DALI driver. Connect the DALI lines of the mini BLC DALI and DALI driver (see wiring diagram below).
- One mini BLC DALI controls one luminaire. It is only allowed to connect a DALI Emergency driver as a second driver on the DALI BUS

### Mini BLC DALI + DALI driver:



## Antenna mounting

- Connect the supplied antenna to the antenna connector.
- The antenna is used for wireless communication with other Mymesh products. Operation of the antenna should not be disrupted.
  - Do **not** mount the antenna inside a metal housing, flat on a metal surface 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 antenna **outside** the luminaire if necessary. Ensure that the thickened part at the end of the antenna is positioned **outside** a housing plus 1.5cm of the antenna cable. Use a grommet for protection of the antenna cable.

- Depending on the installation of the antenna 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 damping 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.

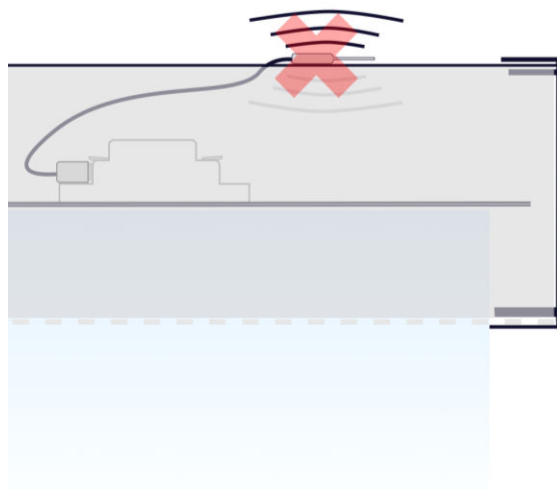


Figure 1: Do not mount the antenna flat on a metal surface.

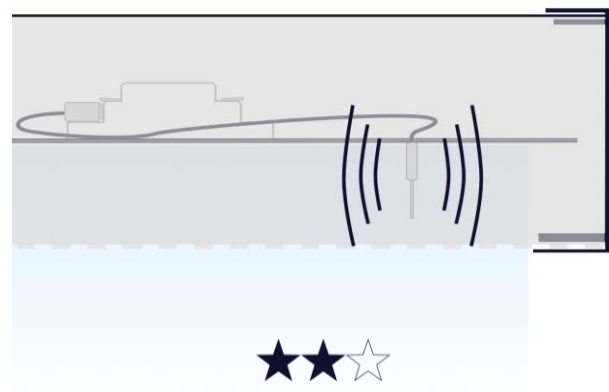


Figure 2: In case of a metal luminaire / housing, route the thickened part of the antenna completely through the LED module to the light diffuser.

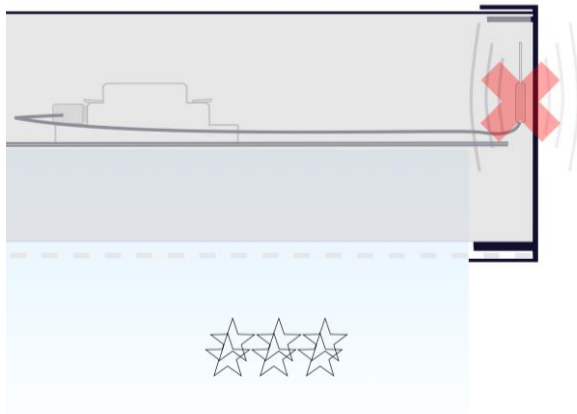


Figure 3: Do not place the antenna in a metal housing / fixture.

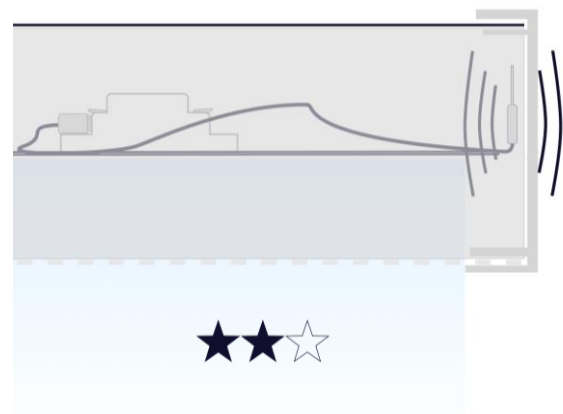


Figure 4: Place the antenna on the inside against a plastic end cap.

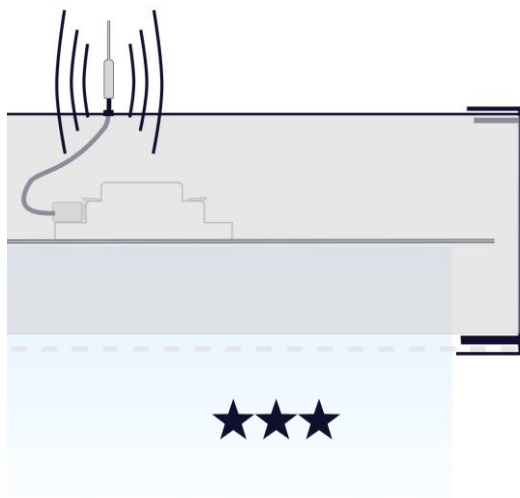


Figure 5: Route the thickened part of the antenna completely through the metal housing / fixture plus 1.5cm of the antenna cable.

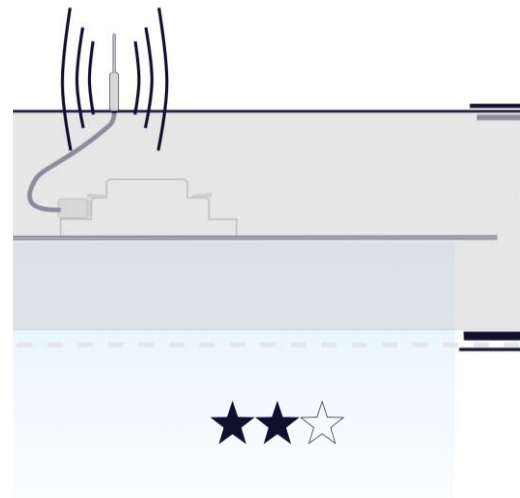


Figure 6: Route the thickened part of the antenna completely through the metal housing / fixture.

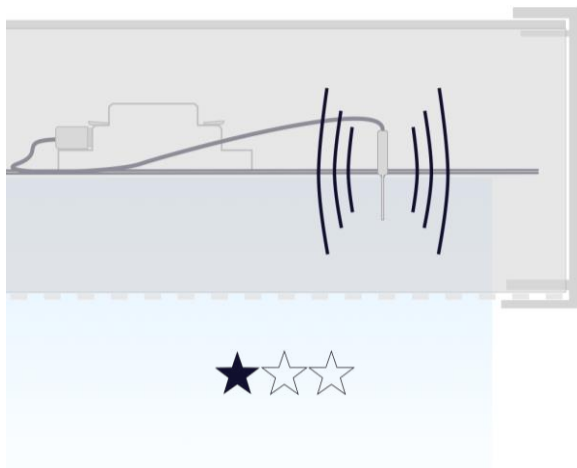


Figure 7: With a full plastic luminaire, the thickened part of the antenna can be led halfway through the LED module to the light diffuser.

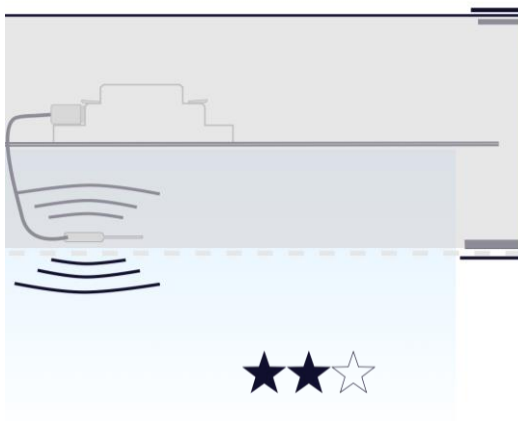


Figure 8: Place the antenna on the inside of the light diffuser.

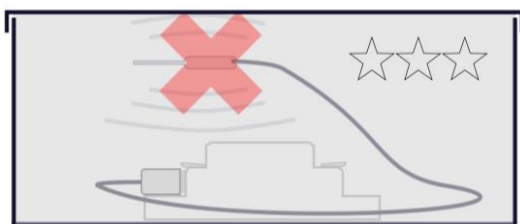


Figure 9: Do not place the antenna in a metal housing / junction box.

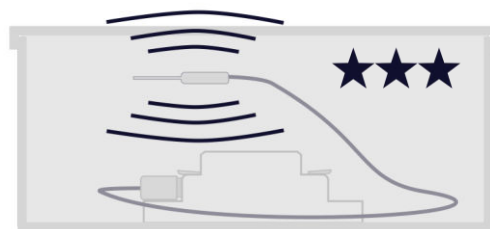


Figure 10: Freely place the antenna in a plastic junction box / housing (not against plastic)

## Configuration

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

## Usage

The mini BLC 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 mini BLC 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 B.V. declares that the radio equipment type mini BLC DALI is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at [chess.nl](http://chess.nl)

## Repair

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



## Recycling

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