

Installation instruction

mini BLC 4DI



The Mymesh mini BLC 4DI is a product in the Chess program for building light control. The mini BLC 4DI is a wireless sensor for monitoring of up to four voltage free contacts and executing related control commands.

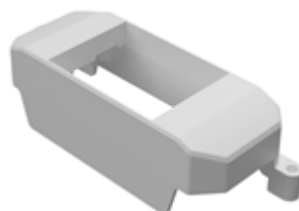
Safety



- 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 4DI 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 4DI if it is damaged.



- The mini BLC 4DI is suitable for use at indoor locations (IP20 protection class). Mount the mini BLC 4DI in an IP66 housing for use at outdoor locations.
- The mini BLC 4DI is double insulated (protection class II).
- The optional strain relief mini BLC can be used to fixate and protect wiring to the mini BLC 4DI.



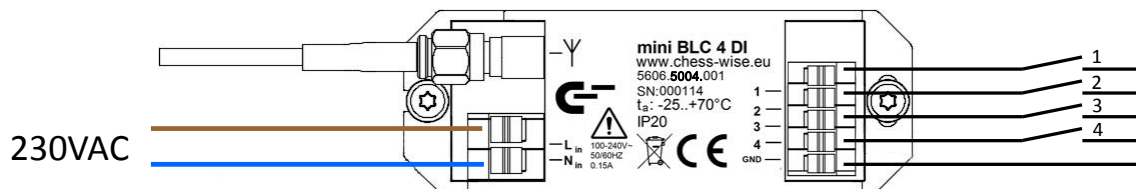
Application

Refer to the mini BLC 4DI product sheet (see chess.nl) for the product specifications and environmental conditions.

Installation

- Install the mini BLC 4DI in the direct neighborhood of other Mymesh products.
- Mount the mini BLC 4DI with 2x M3 screw/bolt (76 mm distance).
- Use maximal 1.5 mm² 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 4DI. Connect one up to four contact inputs and the common GND to external voltage free contacts (see wiring diagram below).
- Use shielded 24 AWG cable (or better), e.g. a CAT6 FTP cable.
- Ground the shield only at **one** end of the cable.
- Maximum cable length is 1000m.

Mini BLC 4DI + voltage free contacts:



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 housing/cabinet 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 housing/cabinet 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.



Antenna Mini BLC



Grommet



Antenna with grommet

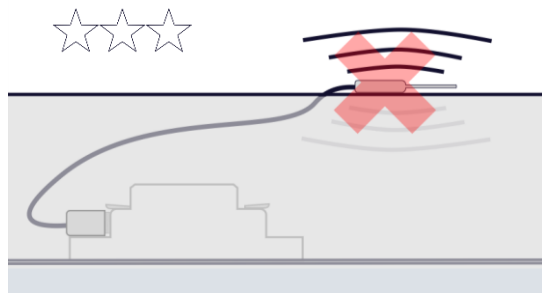


Figure 1: Do not mount the antenna flat on a metal surface.

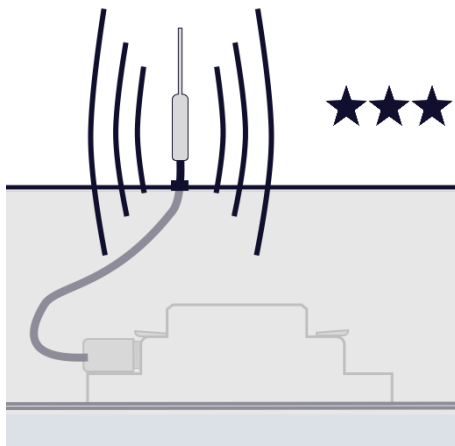


Figure 2: Route the thickened part of the antenna completely through the metal housing / cabinet plus 1.5cm of the antenna cable.

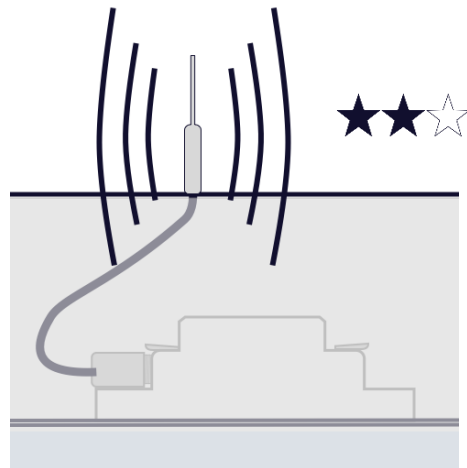


Figure 3: Route the thickened part of the antenna completely through the metal housing / cabinet

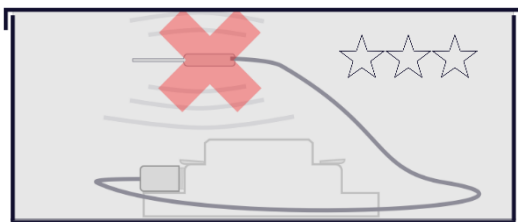


Figure 4: Do not place the antenna in a metal housing / junction box.

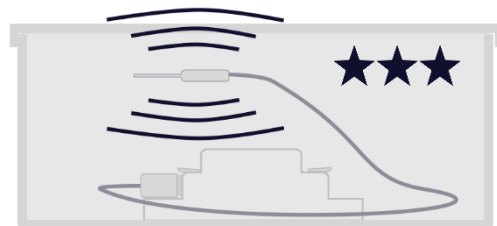


Figure 5: Freely place the antenna in a plastic junction box / housing (not against plastic)

Configuration

Use the iPad Mymesh commission app for configuration of the mini BLC 4DI.

Warning: the mini BLC 4DI solely detects **contact changes** (for example from open to closed contact) and no contact status.

Usage

The mini BLC 4DI will detect changes of the connected contacts and execute the related operations..

Compliance



This product complies with the European directives and relevant standards for low voltage, EMC, RED, REACH and RoHS. The mini BLC 4DI 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 mini BLC 4DI is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at chess.nl

Repair

Do not open this product. In case of failure the mini BLC 4DI must be replaced.



Recycling

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