

Installation instruction

mini BLC Relay



The Mymesh mini BLC Relay is a product in the Chess program for building light control. The mini BLC Relay is a wireless light controller for switching 230VAC loads.

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 Relay 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 Relay if it is damaged.



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



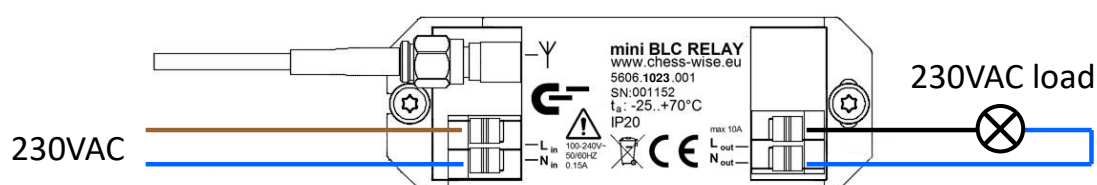
Application

When a load $>5A$ is applied, the maximum ambient temperature is limited to $+45^{\circ}C$. Refer to the mini BLC Relay product sheet (see chess.nl) for the environmental conditions. Use an external 230VAC relay with overvoltage protection if needed (e.g. Schneider AgC20732 + AgC15920).

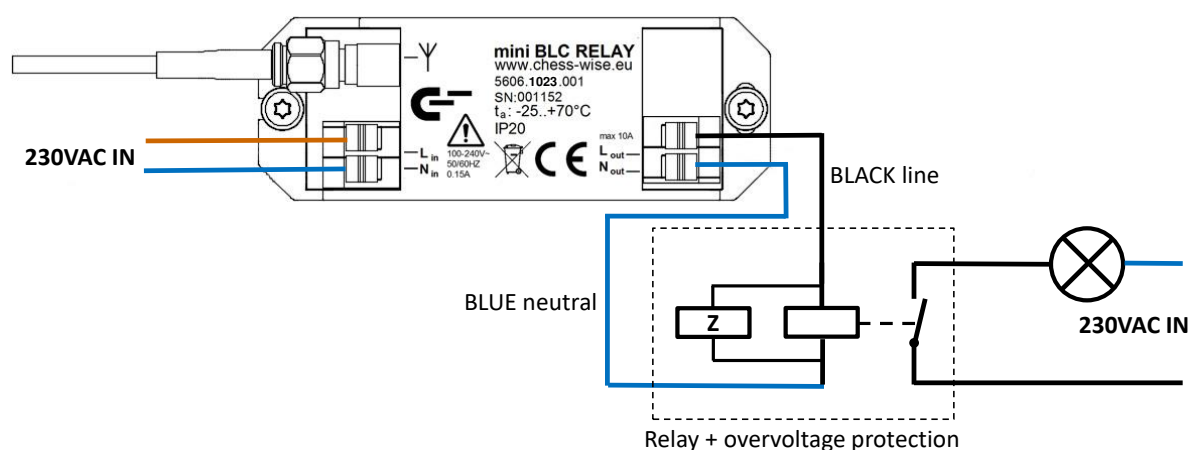
Installation

- Install the mini BLC Relay in the direct neighbourhood of other Mymesh products.
- Mount the mini BLC Relay with 2x M3 screw/bolt (76 mm distance) or double sided tape.
- Use 1.5 mm² (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 Relay.
- Connect the 230VAC load to the output of the mini BLC Relay. Add an RC snubber (e.g. Roxburgh EMC XE1202) in case of an inductive load. See wiring diagrams below.
- One mini BLC Relay is meant to control one luminaire.

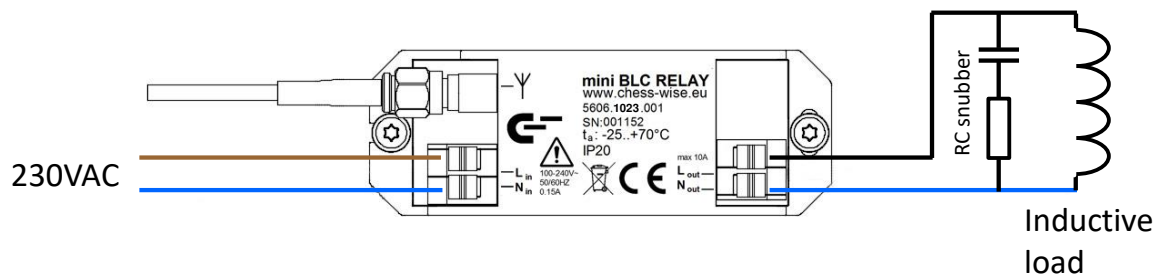
mini BLC Relay + 230VAC load:



mini BLC Relay + 230VAC relay:



mini BLC Relay + inductive load:



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.



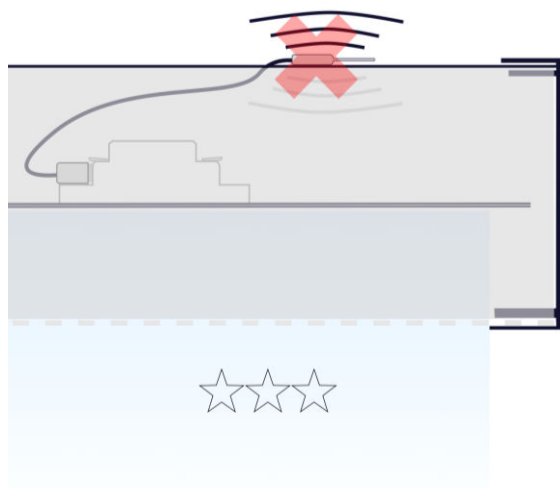


Figure 1: Do not mount the antenna flat on a metal surface.

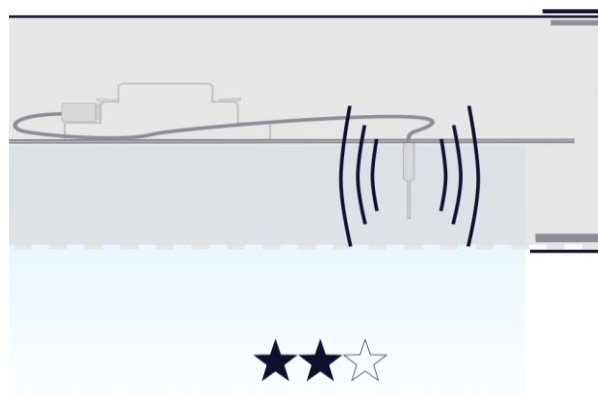


Figure 2: In case of a metal luminaire / housing, route the thickened part of the antenna completely through the LED module to the light diffuser.

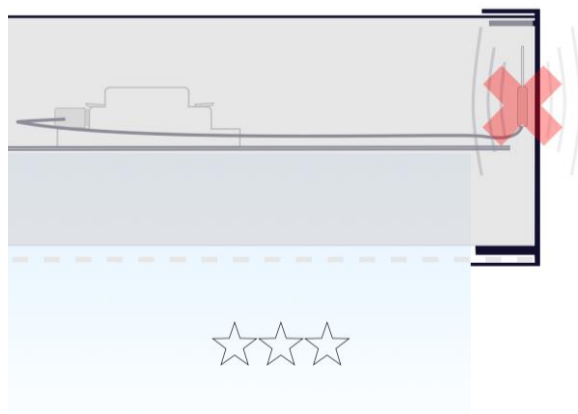


Figure 3: Do not place the antenna in a metal housing / fixture.

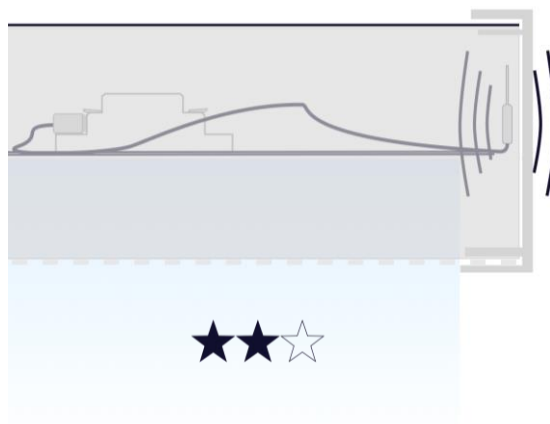


Figure 4: Place the antenna on the inside against a plastic end cap.

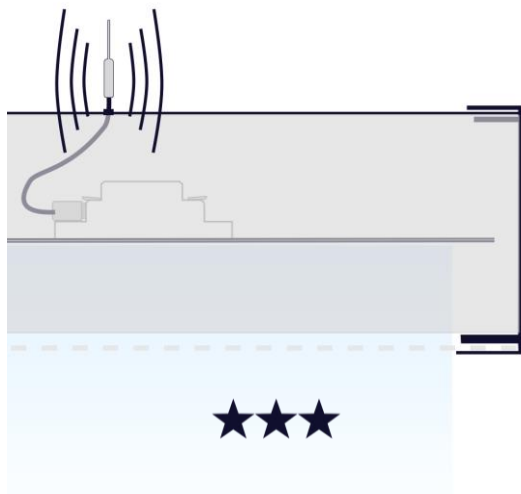


Figure 5: Route the thickened part of the antenna completely through the metal housing / fixture plus 1.5cm of the antenna cable.

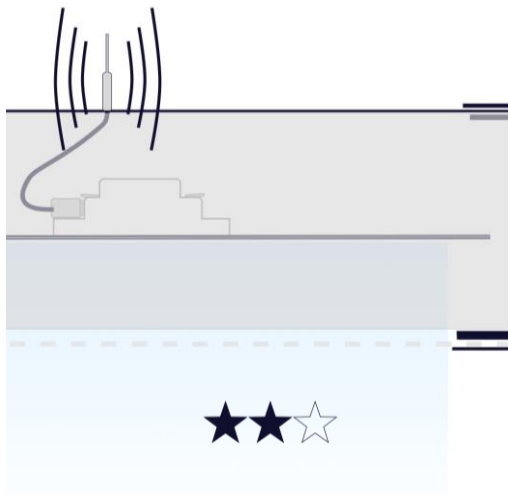


Figure 6: Route the thickened part of the antenna completely through the metal housing / fixture.

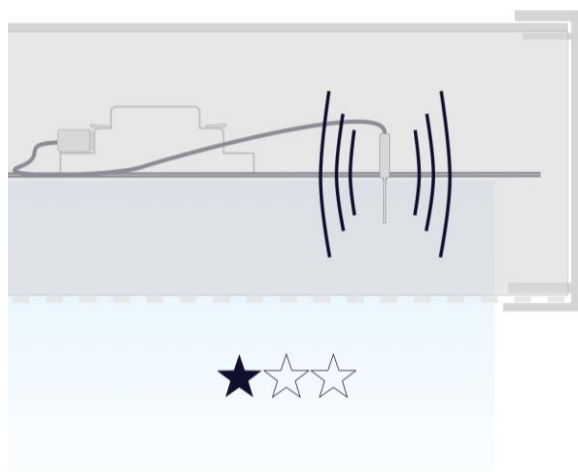


Figure 7: With a full plastic luminaire, the thickened part of the antenna can be led halfway through the LED module to the light diffuser.

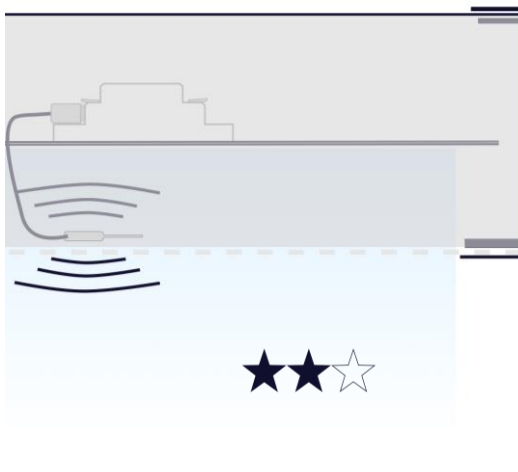


Figure 8: Place the antenna on the inside of the light diffuser.



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

Usage

The mini BLC Relay 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 Relay 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 Relay 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 Relay must be replaced.



Recycling

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