

Single Input Bridge EOS² - Installation Manual

Introduction

The EOS² Single Input Bridge allows you to couple your own external digital input provider to the EOS network. Besides handling the digital event, the bridge can provide 12V to power the provider, such as a sensor. With the bridge, you can inform the network about detected motion, wanted output level for the current light condition, or a fixed output.

In this document, we describe the installation of the EOS bridge. After installation, configuration is needed using the EOS Manager.

Placement considerations

The EOS bridge has a surface mounted housing. The EOS Bridge should always be 'in range' of your EOS network, e.g., have a good RF connection to at least one of the EOS devices in your network. The bridge has an optimized internal antenna. The two main factors influencing the quality of the RF connection are the distance between the bridge and closest EOS device, and obstacles blocking the direct line-of-sight between them.

Placement analysis is needed to find the optimal position of the bridge. The optimal position should allow you to easily mount the bridge while the distance till the first EOS device is less than 30 meters with direct line-of-sight. The recommended distance reduces with line-of-sight obstructions. It is furthermore preferred that the bridge is placed such that it is in range of more than one EOS device enabling communication redundancy. With the bridge in place, you can easily check whether the bridge is part of the network by using the EOS Manager while being physically located at the part of the network opposite to the bridge.

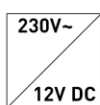
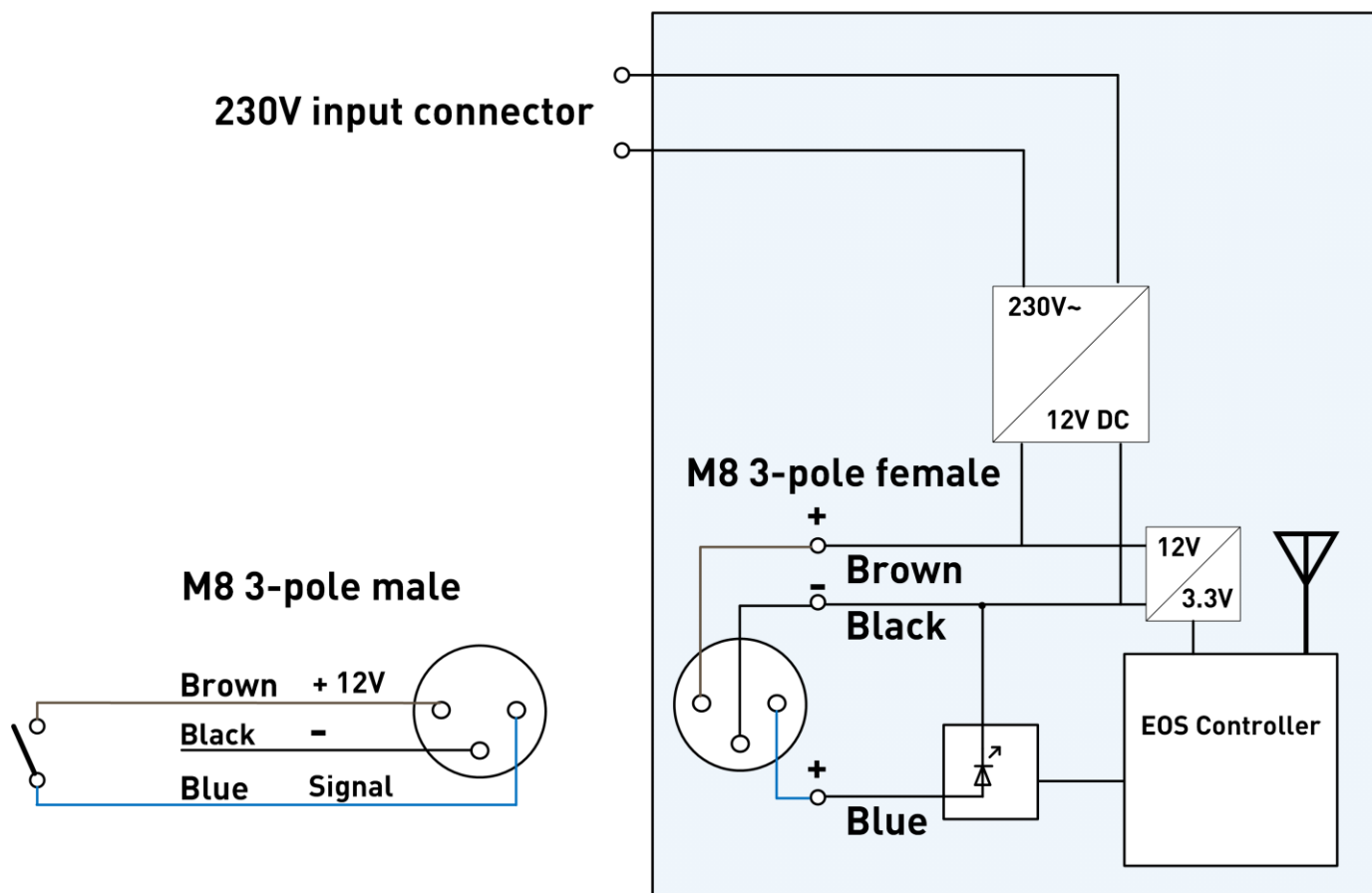
Installation

Below we give an overview of the internals of the bridge. Use the **230V input** connector to power the bridge. We assume that the digital input provided is connected to the **3-pins cable**, according to the wiring described below. The voltage provided to the provider is **12V (200 mA max)**. The expected voltage for a high input signal (blue wire) is **5-24V (30 mA max)**.

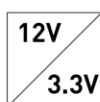
After installation, make sure to configure the bridge to integrate it into your EOS network. Please continue with configuration using the configuration manual.

Internal basic circuit diagram

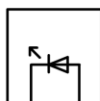
Internal basic circuit diagram



Internal AC/DC power supply



Internal DC power supply



Isolated digital input



2.4GHz antenna

Revision	Date	Description
1	5-9-2017	First release
2	24-11-2017	Extended basic circuit diagram