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#### Engo Link ETR-868 | Wireless Relay Radio controlled 868Mhz, 230V



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Producer: Engo Controls sp z o.o. sp. k. 43-262 Kobielice Rolna 4 St. Poland

### www.engocontrols.com

Technical specifications	
Power supply	230V AC 50Hz
Max load	16(5)A
Communication	wireless, 868 MHz
Receiver control output	COM/NO (volt free)
Receiver dimmension	46 x 46 x 24 [mm]
Transmitter dimmension	46 x 46 x 24 [mm]

## Introduction

The wireless control kit for electrical appliances is the ideal solution in the absence of wiring. It can be used to control devices such as a pump, fan, lighting, electric heater or boiler. The product enables wireless transmission of operating signals and switching on and off of electrical appliances. DIN rail mounting brackets included. The transmitter and receiver are factory-paired.

## Product features





- Voltage-free output
- 🔶 Minimalistic design

Product compilance

This product complies with the following EU Directives: 2014/30/EU, 2014/35/EU, 2014/53/EU i 2011/65/EU.

## **Safety Information**

Use in accordance with national and EU regulations. Use the device only as intended, keeping it in a dry condition. The product is for indoor use only. Installation must be carried out by a qualified person in accordance with national and EU regulations

## Installation

Installation must be performed by a qualified person with appropriate electrical qualifications, in accordance with the standards and regulations in force in a given country and in the EU. The manufacturer is not responsible for non-compliance with the instructions.

## ATTENTION:

For the entire installation, there may be additional protection requirements, which the installer is responsible for.

# **Relay operation**

Connect the receiver to the 230 V AC power supply so that it is in standby mode. The LED on it will light up red. When the transmitter is supplied with 230 V AC it will send a coded signal to the receiver. Receiver is activated and its relay is turned ON (COM-NO output is closed). Correct operation of the devices is signalled by the LED. The signal sent by the transmitter is repeated in cycles. The transmitter has a built-in super-capacitor for back-up power supply to send an 'OFF' command to the receiver when the power supply is switched off.

# Input/Output



## **Pairing devices**

ATTENTION: Devices are already paired! If you want to pair more than one receiver to one transmitter or want to re-pair the set, then follow the steps below:

Connect the receiver and the transmitter to 230V AC power supply.



On the receiver(s) (RX), enter pairing mode by holding down the button for 5sec. The red LED will flash (pairing mode active).



Then activate pairing mode on the transmitter (TX) by holding down the button for 5 sec. The red LED will flash (pairing mode active).



The transmitter stays in the pairing mode for one minute (LED diode f lashes red). Receiver confirms pairing through green LED diode, then diode turns red.





When the transmitter exits the pairing mode, it sends a signal to the receiver. LED diodes on both devices are green now. The devices are ready for work.

## Wiring diagrams

### Solution for situations when wires are not available

Connect the receiver and the transmitter according to the diagram below. Opening the contacts of "External contact" causes the transmitter to turn OFF and the receiver returns to its initial position (relay switch OFF). The relay in the receiver is turned ON, supplying 230V to the controlled device, which is then activated. Opening the contacts of "External contact" causes the transmitter to turn OFF and the receiver returns to its initial position (relay switch OFF).



# Solution when wires between thermostat and a wired control box are not available

Connect the receiver and the transmitter according to the diagram below. Connect the control box to the 230V power supply. Operation (heating) of the thermostat causes activation of the transmitter, which in turn leads to activation of the receiver. The relay in the receiver turns ON and applies 230V to the 'SL' contact in the control box, which in turn switches on the thermoelectric actuator. When thermostat stops heating, transmitter is turned OFF so and receiver turns OFF its relay.



#### Wireless switching the circulation pump via light switch

Connect the receiver and the transmitter according to the diagram below. Switching on the lighting switches on the transmitter and sends a signal to the receiver. The relay in the receiver is short-circuited, giving 230V to the circulation pump, which is then activated. Switching off the lighting causes the voltage in the transmitter to disappear. The receiver returns to its initial position by switching off the circulation pump.



# Solution the problem of missing 1 wire between the thermostat and the control box

Connect the receiver and the transmitter according to the diagram below. Connect the control box to the 230 V power supply. Operation of the control box causes activation of the transmitter, which in turn leads to activation of the receiver. The relay in the receiver is short-circuited by applying 230V to the 'SL' contact in the control box. In the control box, which in turn activates the thermoelectric actuator. When thermostat stops heating, transmitter is turned OFF so and receiver turns OFF its relay.



#### Wireless connection of the control box and circulation pump

Connect the receiver and the transmitter according to the diagram below. Switching on the pump output in the control box will activate the transmitter, which will send a signal to the receiver. The relay in the receiver short-circuits 'turning on the circulating pump. Switching off the output in the control box causes the voltage in the transmitter to disappear, in which case the receiver returns to its initial position switching off the circulation pump.



#### Wireless connection of the control box and heating source

Connect the receiver and the transmitter according to the diagram below. Switching on the pump output of the control box will activate the transmitter, which will send a signal to the receiver. The relay in the receiver short-circuits when the heat source is switched on. Switching off the output in the control box causes the transmitter to lose voltage, in which case the receiver returns to its initial position by switching off the heat source.

