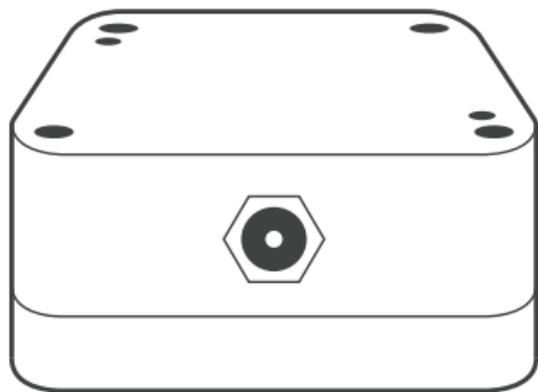




Gate

www.getproxi.com

Information about the rB-T02S2 module



Purpose

The module is used to control entry gates and garage doors with a mobile device. It cooperates with gate controllers produced by different manufacturers.

Operation

The module allows an entry or garage door to be controlled with a mobile device as well as by a traditional remote control.

The free Proxi application can be downloaded from Google Play and the App Store. It requires a mobile device that is compatible with Bluetooth 4.0 and iOS7 or Android version 4.3 or newer.

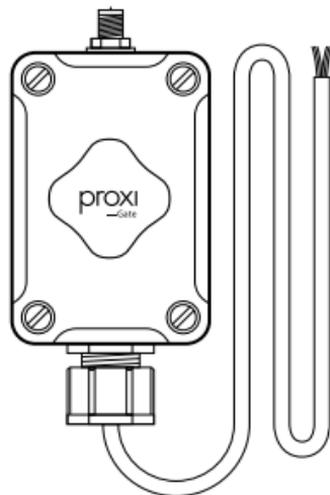
The Proxi Gate module has two outputs that allow the control of two gates, a gate and a door or two functions of one gate.

The operating mode of the module's output channels are configured with the help of the mobile app.

The available modes are monostable (single impulse returned at the output) or bistable (maintaining the output state).

If the monostable state is selected, the period for which the on state at the output is maintained should also be set. The default period is 1 second.

Installation



Installation

The Proxi Gate module has a waterproof housing rated at IP65 with an external antenna connection. This allows an antenna to be fitted in the optimal location to extend the radio range, e.g. away from the gate structure.

To connect the module to the gate controller, open the housing and connect the cables to the junction located on the PCB (Fig. 1).

Four cables are sufficient to control a single gate function.

1. PWR +/-/-
2. PWR -/+/-
3. OUT1+
4. OUT1-
5. OUT2+
6. OUT2-
7. IN1 A *
8. IN1 B *
9. IN2 A *
10. IN2 B *

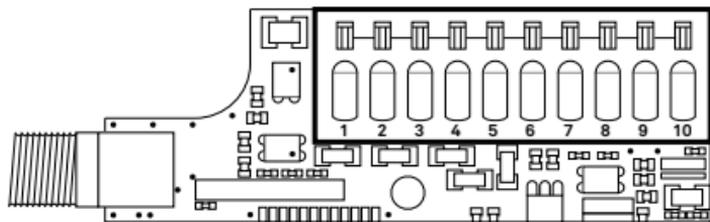


Fig. 1. View of part of the PCB together with the 10-pin connector

** Not supported in version 1.0.0*

Connect the Proxi Gate connector terminals to the terminals of the gate controller. The basic method of installing the Proxi Gate module is to connect it to the input of the manual control switch. The location and terminal description depends on the gate controller module being used.

Detailed information on the functioning of the gate controller and a description of the connectors can be found in the instructions for the given controller model.

Installation

Power supply connection:

In most gate controllers, the voltage required to power the switches, photocells and lighting at the limits is available at the connector. If the voltage is in the range of 9-25V DC or AC, it should be used to power the Proxi Gate module. Any power polarity can be used.

Connection of the Proxi Gate output channels:

When connecting output channel cables, the connector polarity given in the description should be maintained. Depending on the desired configuration, one or two Proxi Gate module channels can be connected.

Single channel control

The typical operation of a gate controller is a sequence of "open-stop-close" or "open-close". To control the gate with one switch in the mobile app, apart from the power supply, two circuits should be connected:

1. OUT1+ should be connected to the appropriate input of the gate controller, usually that for manual control or an additional radio receiver.
2. OUT1- should be connected to the Ground of the gate controller, usually marked as COM, GND or "-".

Two channel control

The Proxi Gate module operation in two-channel mode is analogous to that of a remote control with two buttons.

To control two functions of the gate with the help of two buttons in the mobile app, connect the power and the control circuits as follows:

1. OUT1+ should be connected to the appropriate input of the gate controller, usually that for manual control or an additional radio receiver.
2. OUT1- should be connected to the Ground of the gate controller, usually marked as COM, GND or "-".
3. OUT2+ should be connected to the appropriate second input that controls the second gate function, usually the door function (partial opening), the function of opening with maintenance of the state (the gate does not close automatically), or other.
4. OUT2- should be connected to the Ground of the gate controller, usually marked as COM, GND or "-".

Installation

Installation of the Proxi Gate module

The Proxi Gate module has an antenna and a cable that is connected by screwing in the antenna connector to the SMA socket located on the exterior of the housing.

A 27mm antenna is attached to the end of the cable. To ensure the best radio range for

the module, the antenna should be fitted outside of the garage or the construction of the gate. Installation of the antenna on a metal gate will dampen the radio signal. If the antenna has to be fitted inside, it should be located by the front wall, beside the doors.

Fig. 3 shows examples of where the Proxi Gate antenna module could be fitted inside the garage. Location 1 is the best and recommended for the best radio range. In location 4, the signal is most dampened.

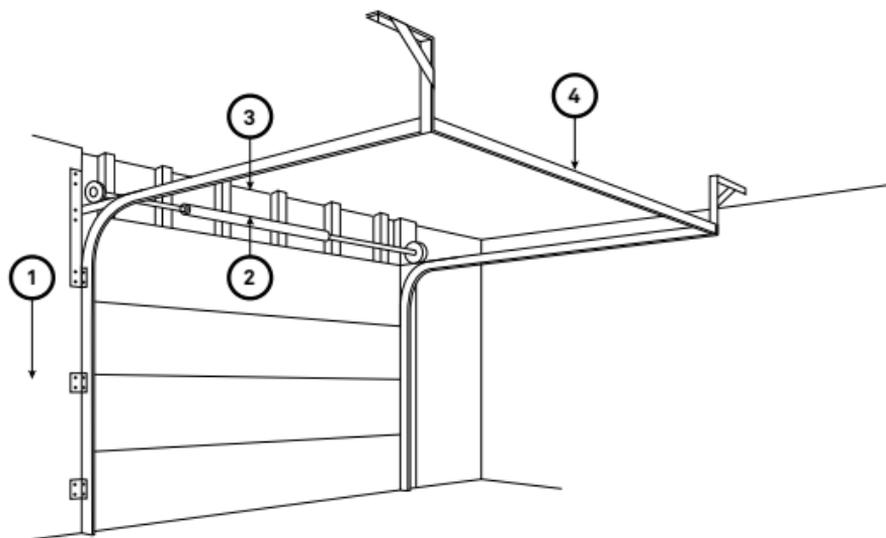


Fig. 3. The location of the Proxi Gate antenna module

Technical data

ENVIRONMENTAL CONDITIONS

Operating temperature	-30 °C / +55 °C
Protection code	IP65

ELECTRICAL PARAMETERS

Power voltage	AC/DC 9 V–24 V (any polarity)
Peak power voltage	50 V
Peak current	70 mA
Average power	120 mW

OUTPUTS

Number of outputs	2
Output polarity	Yes
Output galvanic separation	Yes (each separately)
Max load voltage	DC 50 V
Max load current	DC 20 mA
Max output voltage at switching on	0,3 V (for a load current of 20 mA)
Surge protection	Yes
Output overvoltage protection	Yes
Protection against reverse output polarity	Yes (diode contact with thermal fuse)

Technical data



INPUTS

Number of inputs	2 (inputs with polarity detection)
Output galvanic separation	Yes
Min. input voltage	AC/DC 10 V
Max. input voltage	AC/DC 25 V
Surge protection	No
Input mode	Monostable/Bistable (mode and duration are defined by the app)

RADIO PARAMETERS

Radio connection	Bluetooth, 2,4 GHz
Signal power	6 mW
Transmission type	Bi-directional
Coding	Yes

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