

EZgate User manual

Rev. 4 – 17/04/11



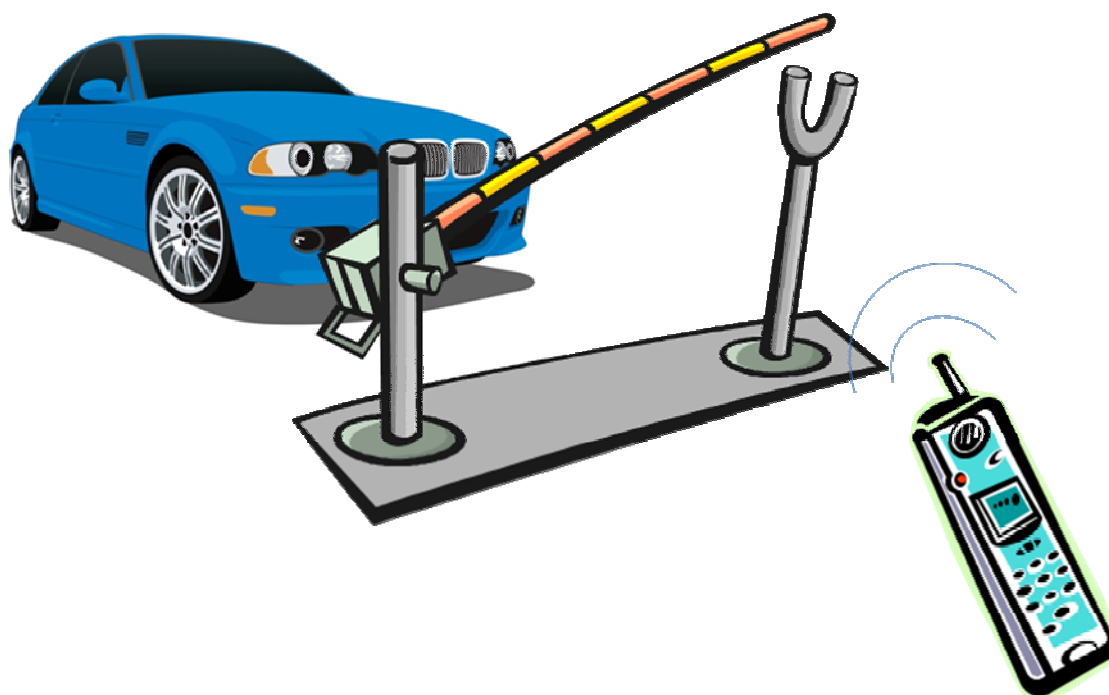
1. Overview

The GateOpen is a complete system solution for cellular gate\door access control.

The unit stores white list of authorized users; when someone calls the unit, the unit hangs-up the call and check if the caller ID exists in the list, if it does, a pulse generated by internal relay, command the gate\door to open.

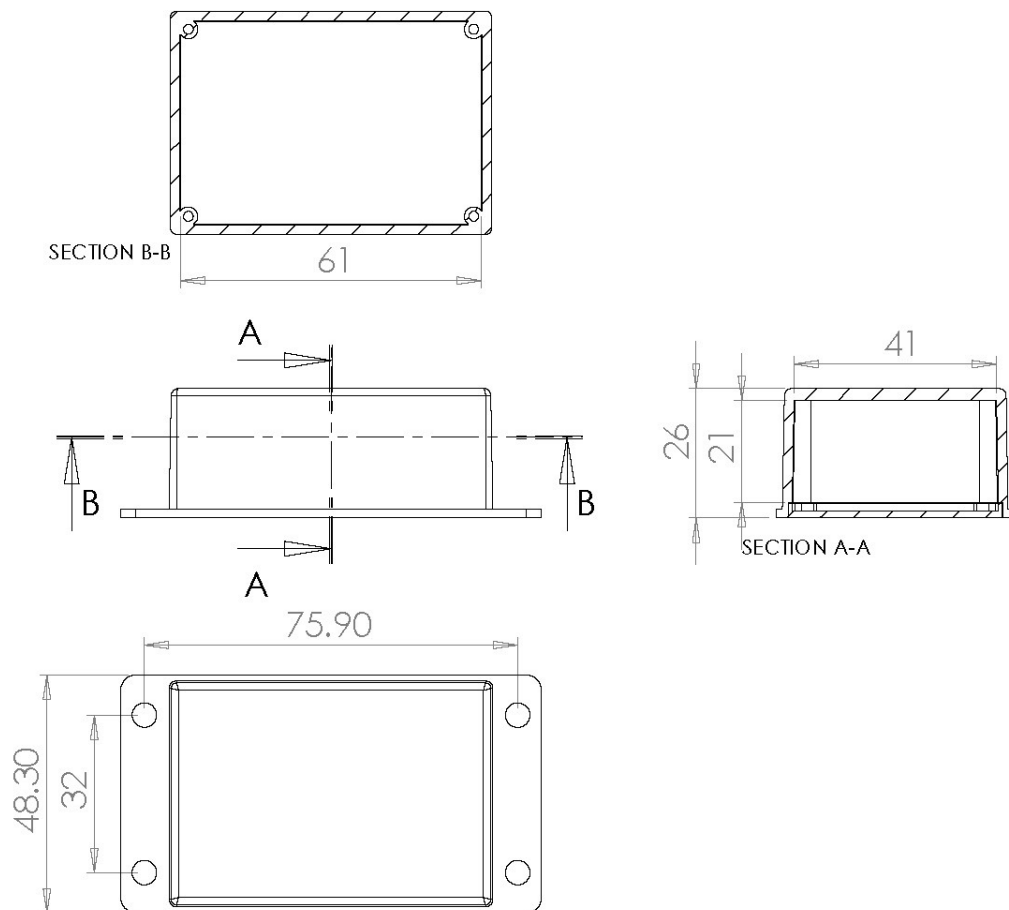
No call cost for the user.

The unit holds up to 1600 authorized users and up to 400 restricted (limited) users, totally 2000 users.



2. General Product Description

2.1 Dimensions



2.2 Weight

120 grams.

2.3 Input voltage

5V-30V DC 1A

2.4 Casing material

The case made from plastic PC
IP64 Avoid exposing the unit to liquid or moisture

2.5 Environmental requirements

2.5.1 Temperature range

	Ambient temperature in plastic enclosure	Note
Operating Temperature Range	-20°C to +55°C	The unit is fully functional in all the temperature range, and it fully meets the ETSI specification
	-40°C to +85°C	The module is fully functional in all the temperature range. Temperatures outside the range -20°C to +55°C, might slightly deviate from ETSI specifications
Storage and Non Operating Temperature Range	-40°C to +85°C	

2.5.2 Air humidity range

5% - 85%

2.5.3 RoHS compliance

All hardware components are fully compliant with the EU RoHS and WEEE Directives

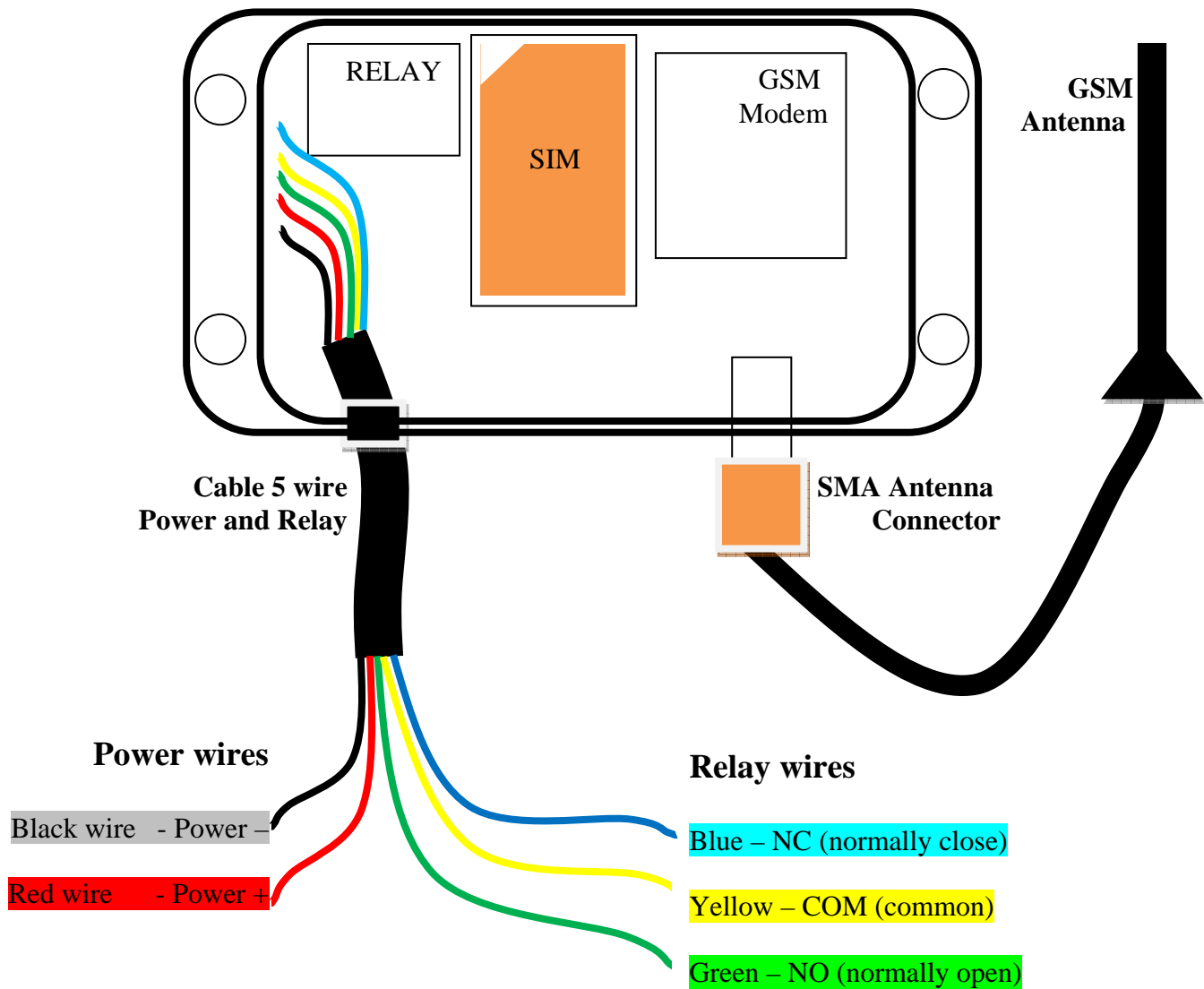
2.6 GSM frequencies

The unit supports quad band GSM frequencies

- GSM-850
- E-GSM-900
- DCS-1800
- PCS-1900

3. Installation

3.1 Connection diagram



3.2 SIM card insertion

With a Philips screw driver open the SIM card drawer cover and insert the SIM card. Make sure the SIM card is capable to receive incoming SMS messages and to identify a caller ID. If SIM needs PIN code please use 1111.



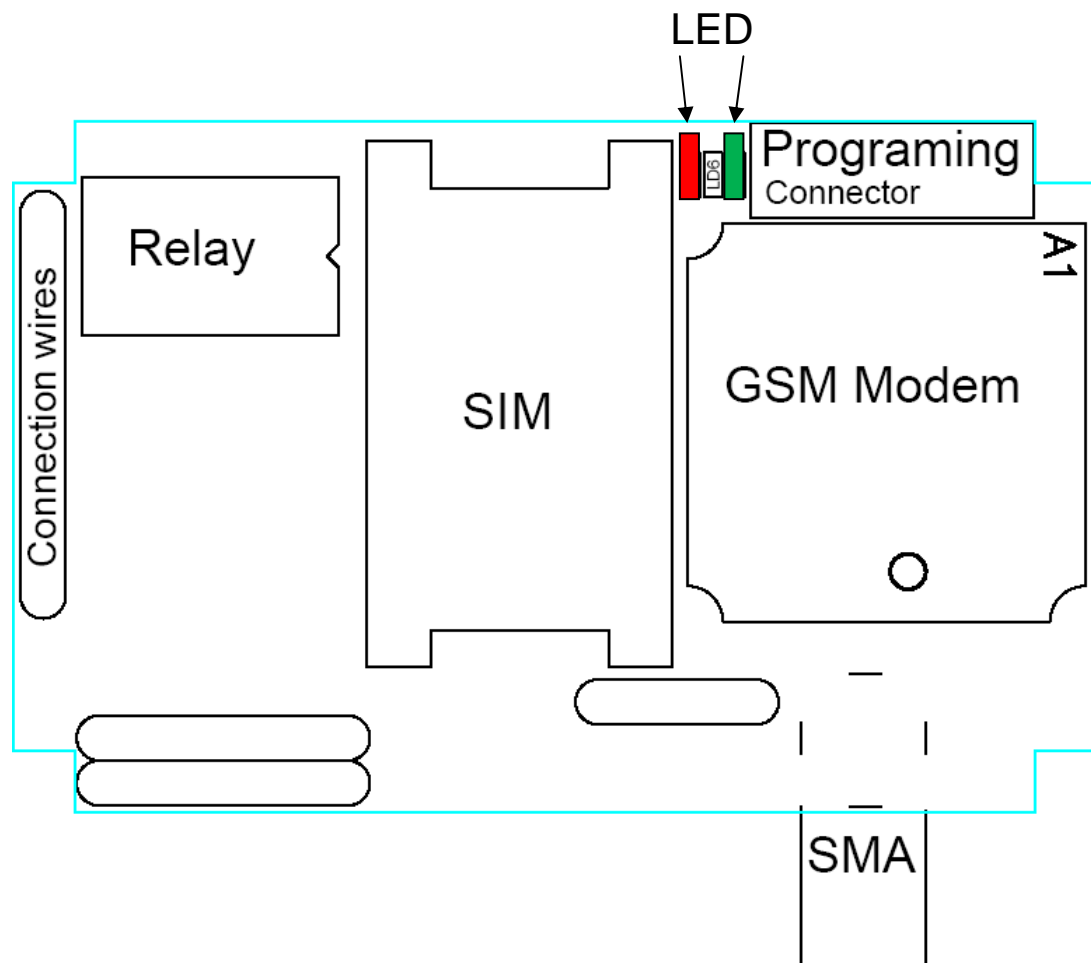
3.3 Status Led's

Red LED displays the network status of the EZgate.

Red LED status	Device Status
permanently on	a call is active
fast interrupt sequence (period 0,5s, Ton 1s)	Net search / Not registered / turning off
slow interrupt sequence (period 0,3s, Ton 3s)	Registered full service
permanently off	device off

Green LED displays the operating status of EZgate

Green LED status	Device Status
permanently ON	Unit active
fast interrupt sequence (period 1s, Ton 1s)	Error: Net search / Not registered
OFF for 1s and then ON	Unit get phone call
permanently OFF	device off



3.4 GSM antenna

The GSM antenna needs to be connected to the SMA connector in the front panel
Use external antenna with SMA connection, Maximum 2.5dB.

3.5 Power Supply

The power supply for the GateOpen has to be a single voltage source of POWER 5V-30V capable of providing a peak during an active transmission. The GateOpen is protected from supply voltage reversal. An internal fuse ensures an electrical safety according to EN60950. This fuse is not removable.

3.5.1 Supply voltage requirements

A DC power supply must be connected to the Power input:

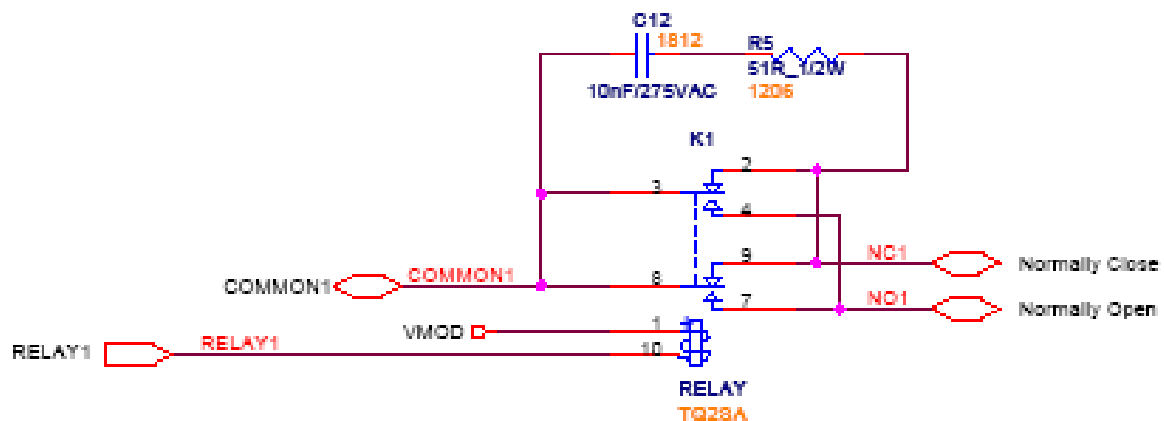
- Input voltage range 5V - 30V DC
- Nominal Voltage 12V DC
- Power Supply current rating: min. 1,2A @12V
- Power Supply ripple: max. 120mV
- Input current in idle mode: 25mA @ 12V
- Input average current while GSM network active (call, etc...): 100mA @ 12V

3.6 Internal Relay

Electronic Gate requires dry contact activation.

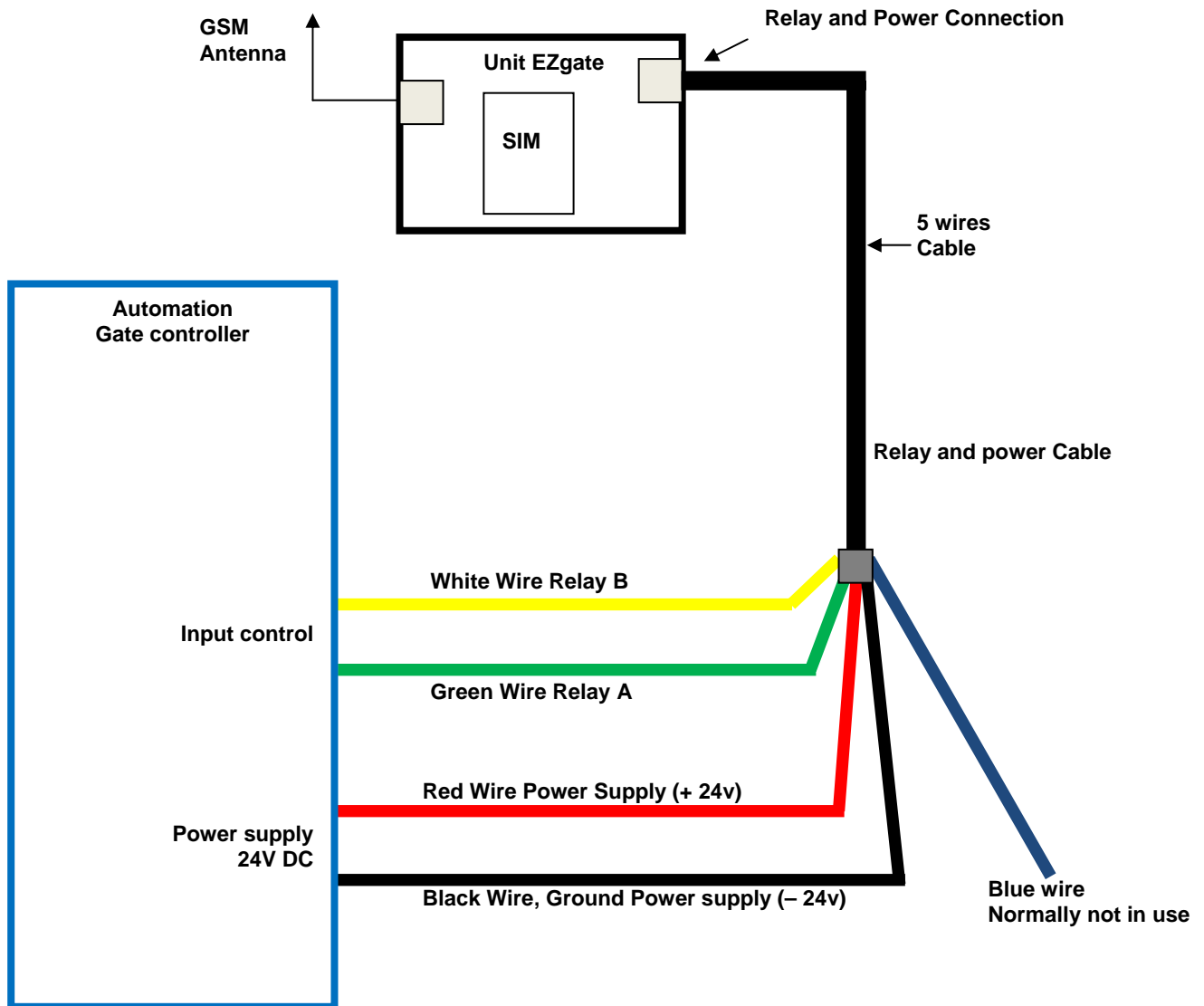
The internal Relay used for controlling external circuit devices or applications.

The relay parameters: Maximum voltage = 30V @ max. 1A.

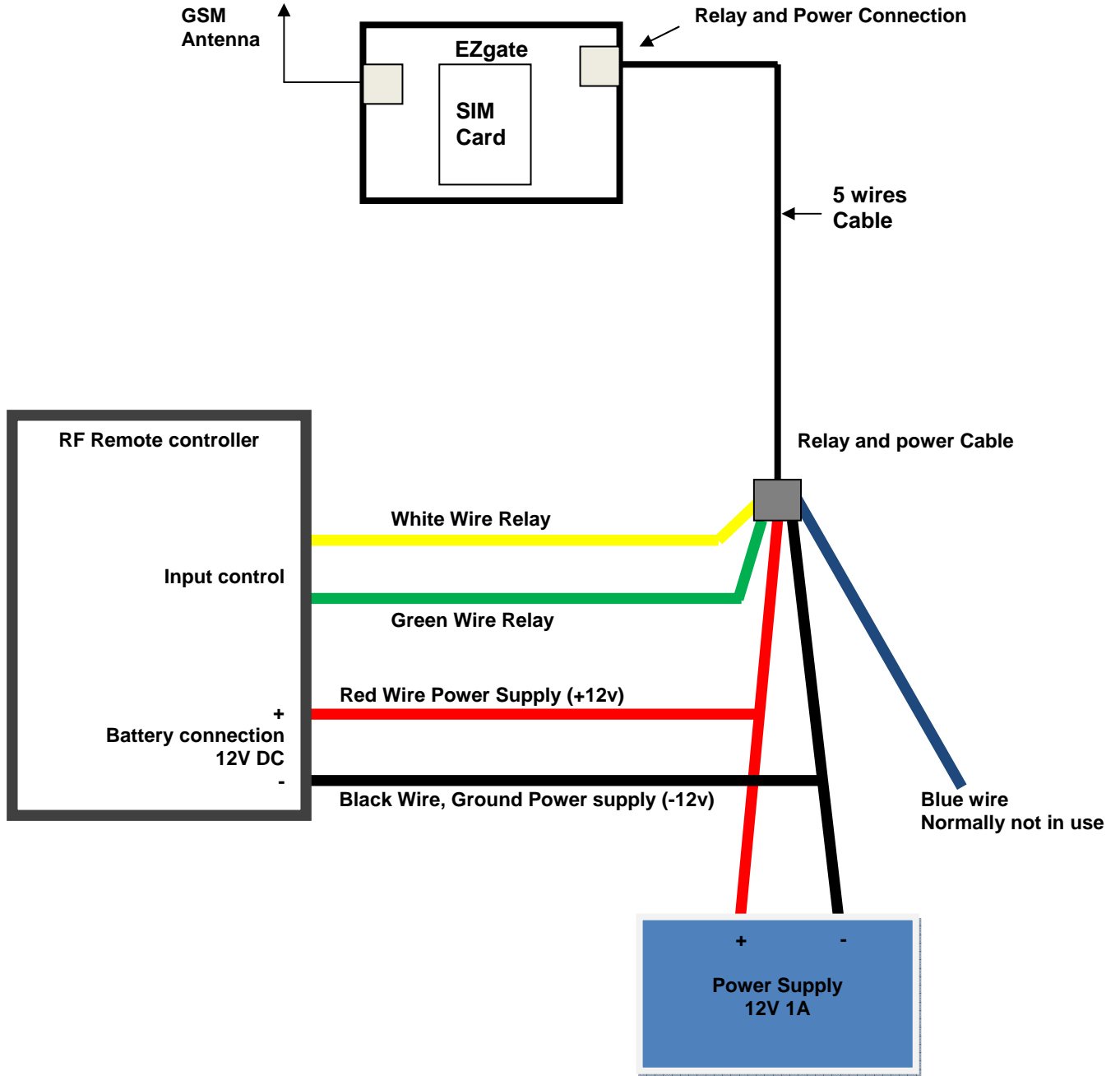


3.7 Unit Connection to power and relay

Option 1: EZgate direct connection to Gate Controller



Option 2: EZgate connection to remote Controller
This connection no needs to open the Gate controller



3.7 Unit turning on

After power the unit on, the **RED LED** will indicate the unit connection to the GSM network. The internal software will finish being loaded within 3 minutes. The **GREEN LED** will be turned on to indicate the unit is ready for use.

3.8 Access the gate\door

A registered user may call the unit and activate it output.

If the user cellular phone blocks its caller ID, he can access the unit by SMS.

If an access control by SMS is desired, the SMS: **O** needs to be sent to the unit. (Lowercase or uppercase "**O**" means "OPEN")

4. SAFETY RECOMMANDATIONS

READ CAREFULLY

1. The unit does not provide protection from lightning and surge. For outdoor installation use outdoor plastic case safety approve according UL 50. Additional provide protection from lightning and over voltage according National code.

2. be sure the use of this product is allowed in the country and in the environment required. The use of this product may be dangerous and has to be avoided in the following areas:

Where it can interfere with other electronic devices in environments such as hospitals, airports, aircrafts, etc. Where there is risk of explosion such as gasoline stations, oil refineries, etc it is responsibility of the user to enforce the country regulation and the specific environment regulation. Do not disassemble the product; any mark of tampering will compromise the warranty validity. We recommend following the instructions of the hardware user guides for a correct wiring of the product. The product has to be supplied with a stabilized voltage source and the wiring has to be conforming to the security and fire prevention regulations. The product has to be handled with care, avoiding any contact with the pins because electrostatic discharges may damage the product itself. Same cautions have to be taken for the SIM, checking carefully the instruction for its use. Do not insert or remove the SIM when the product is in power saving mode. The system integrator is responsible of the functioning of the final product; therefore, care has to be taken to the external components of the unit, as well as of any project or installation issue, because the risk of disturbing the GSM network or external devices or having impact on the security. Should there be any doubt, please refer to the technical documentation and the regulations in force. Every unit has to be equipped with a proper antenna with specific characteristics. The antenna has to be installed with care in order to avoid any interference with other electronic devices and has to guarantee a minimum distance from the body (20 cm). In case of this requirement cannot be satisfied, the system integrator has to assess the final product against the SAR regulation. The European Community provides some Directives for the electronic equipments introduced on the market. All the relevant information's are available on the European Community website:

<http://europa.eu.int/comm/enterprise/rtte/dir99-5.htm>

The text of the Directive 99/05 regarding telecommunication equipments is available, while the

Applicable Directives (Low Voltage and EMC) are available at:

http://europa.eu.int/comm/enterprise/electr_equipment/index_en.htm

5.0 Product specified approval for CE

Name: Industrial GSM Communication unit
Model: EZgate

Reference standard(s):

Radio

Number	Market	Standard	Procedure
1	Europe	EN 301 511 V9.0.2	Spurious Emissions testing

EMC

Number	Market	Standard	Procedure
2	Europe	EN 301 489-7 V1.2.1	partial testing and report
3	USA	47 CFR part 15:06 sb.B	Verification

Safety

Number	Market	Standard	Procedure
4	Europe	EN 60950-1:06	DoC