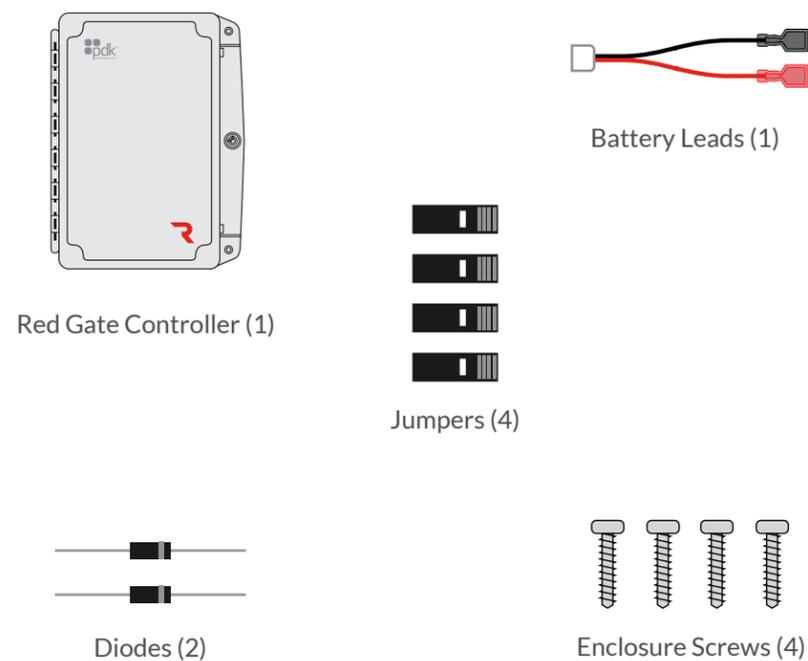
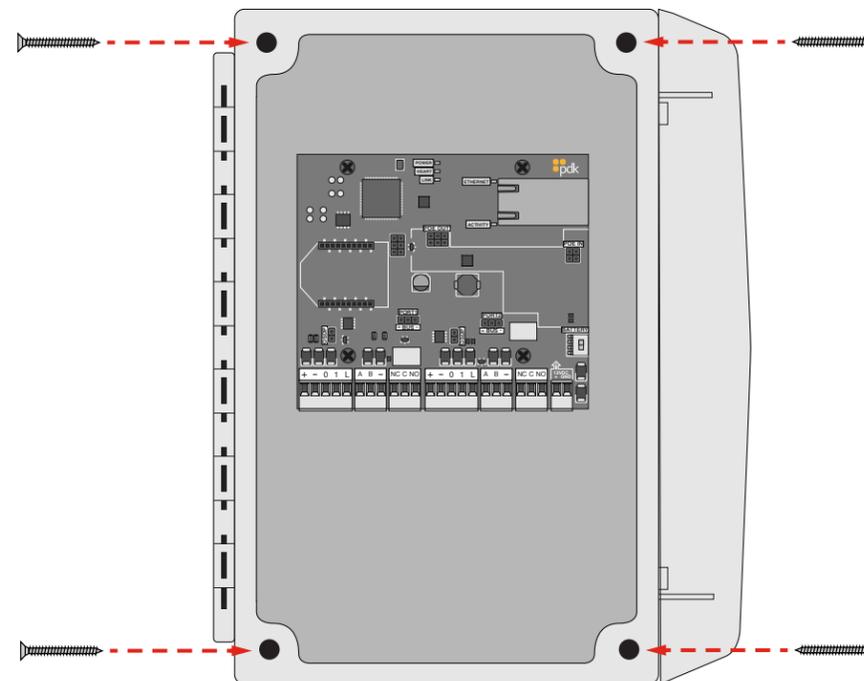


## 1. Package Contents

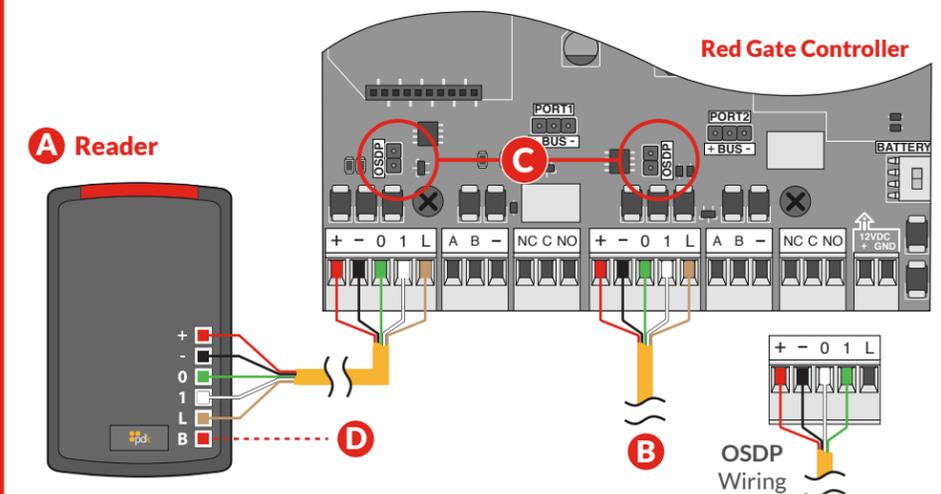


## 2. Mounting Controller



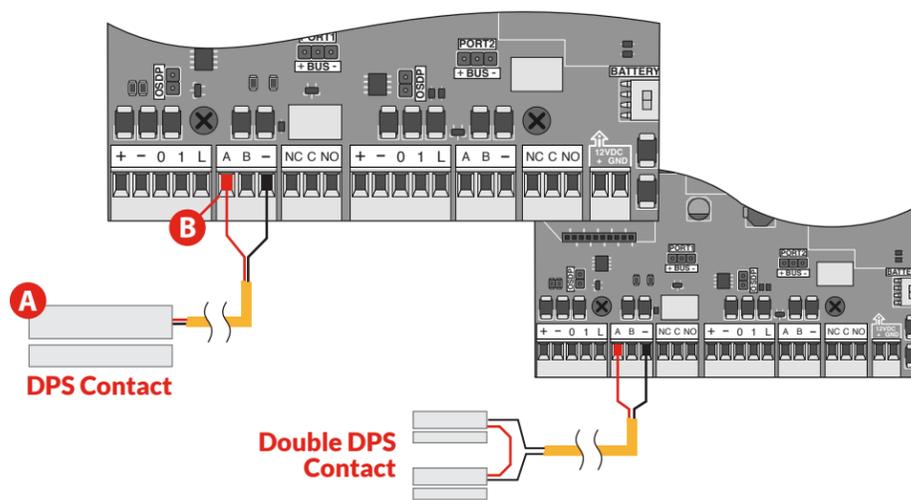
**Mount** - Mount the Red Gate enclosure securely to a wall.

## 3. Reader Connection



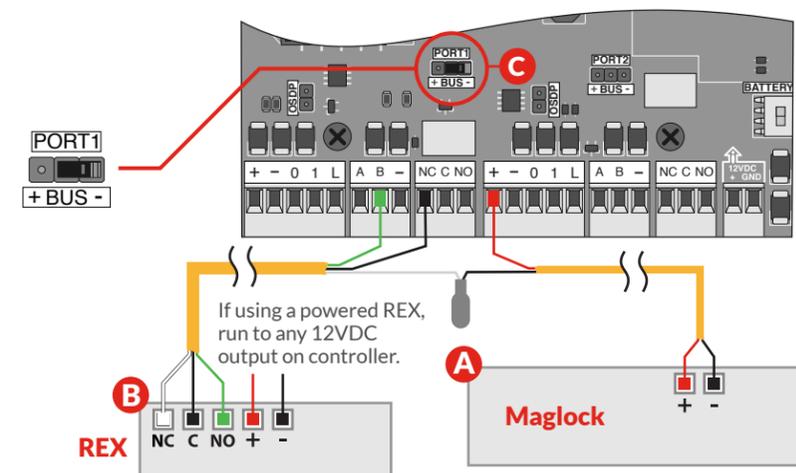
- A Main Reader** - The main reader is mounted at the door with a 22/5 or 22/6 wire ran to the door controller. Wire the reader to the controller as shown above. Be sure to check polarity and voltage prior to powering the controller.
- B Secondary Reader** - Wire the second reader to the controller as shown above. Be sure to check polarity and voltage prior to powering the controller.
- C OSDP** - Place jumper(s) to enable OSDP (see OSDP reference guide at the end of this guide for more info)
- D Piezo** - Can be connected to available relay and configured with software.

## 4. Input A / DPS Connection



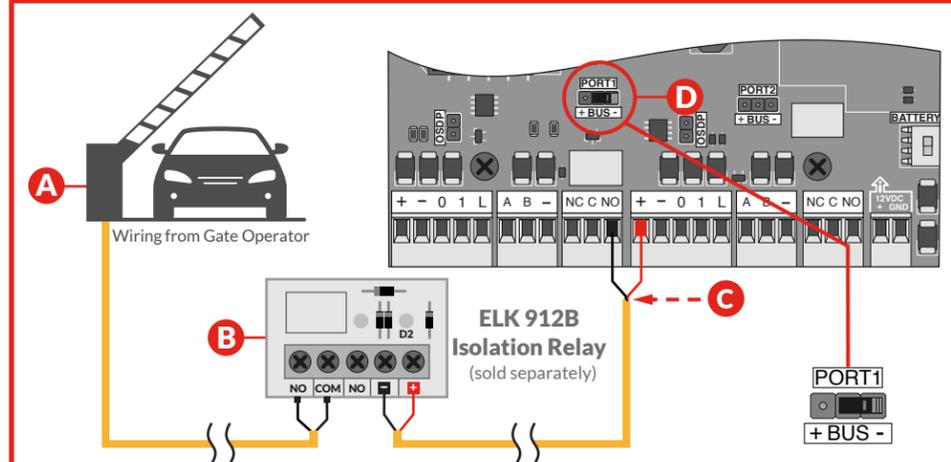
- A DPS (Door Position Switch)** - The DPS is mounted on the door frame in the desired location with a 22/2 wire running from the DPS to the controller. Wire the DPS to the controller as shown above. When using two DPS sensors for double doors, you will wire them in series with only two conductors running back to the controller for connection.
- B AUX Input** - A rule can be set up to trigger events or outputs based on this input trigger.

## 5. Input B / REX Connection



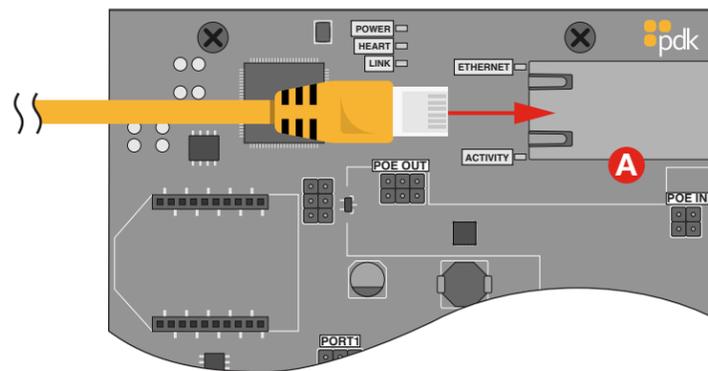
- A Maglock** - When installing a Maglock, it is typical to install a REX (Request to Exit) at the door for free egress. Run an 18/2 wire from the Maglock to the door controller, connecting to the Maglock as shown.
- B REX (Request to Exit)** - The REX is mounted in the desired location with an 18/5 wire ran from the REX to the controller. Wire the REX to the controller and Maglock, as shown above. If reporting is not needed in the system, simply eliminate the green-labeled wire.
- C Jumper** - Use the designated jumper(s) to energize the relay output NO and NC to utilize the output as a wet contact.

## 6. Locking Relay



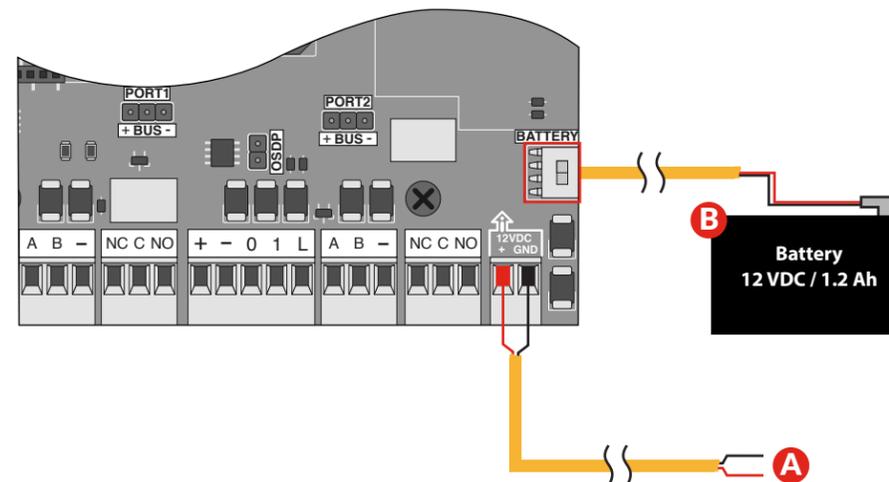
- A Gate Operator** - Follow the gate operator wiring instructions to connect the gate operator to an ELK 912B Isolation Relay.
- B Isolation Relay** - Installation of an ELK 912B Isolation relay is recommended to prevent electrical damage to the Red Gate, Isolation relay is sold separately.
- C Locking Relay** - Connect the ELK 912B Isolation relay to the Red Gate by connecting the positive wire into a positive port and the negative wire into the NO port on the board.
- D Jumper** - Use the designated jumper(s) to energize the relay output to be NO by placing the jumper on the negative (-) and center pins.

## 7. Communication Connections



- A Ethernet** - All Red controllers come with a built-in RJ45 connection for network connectivity. Once connected, the Red Gate controller is Self-Discoverable from [pdk.io](http://pdk.io) using IPV6. Alternatively, you may use IPV4 or assign a static IP using [pdk.io](http://pdk.io) if desired.

## 8. Power Connection



- A DC INPUT** - Use included 14 VDC, 2 Amp transformer for DC power input. It is recommended to use 18/2 wire. For high voltage applications, use the HV Converter (PN: HVC).
- B BATTERY** - The enclosure will fit most 12 VDC 1.2 Ah batteries. The battery is connected with supplied leads and is polarity sensitive.

## Reference Guide

**Fire Input** - To integrate the fire system using a Red gate, refer to wiring diagrams at [prodatakey.zendesk.com](http://prodatakey.zendesk.com)

**Programming** - After the Red Gate controller has been installed, full configuration and system programming will be performed within the [pdk.io](http://pdk.io) software. Full configuration instructions can be found in the programming manual at [prodatakey.zendesk.com](http://prodatakey.zendesk.com)

**Reader Compatibility** - ProdataKey does not require proprietary readers. Door controllers accept a wiegand input, including biometric readers and keypads. OSDP readers are supported by using included jumper (see OSDP reference guide). Contact support for details.

**UL 294 Compliance** - All equipment must meet appropriate UL certifications. For UL listed installations, all cable runs must be less than 30 meters (98.5')

**Part Number** - RGE

### PDK Technical Support

Phone: 801.317.8802 option #2

Email: [support@prodatakey.com](mailto:support@prodatakey.com)

PDK Knowledge Base: [prodatakey.zendesk.com](http://prodatakey.zendesk.com)

## OSDP Reference Guide

**What is OSDP** - Open Supervised Device Protocol (OSDP) is an access control communications standard developed by the Security Industry Association to improve interoperability among access control and security products. OSDP brings heightened security and improved functionality. It is more secure than Wiegand and supports AES-128 encryption.

**OSDP Wire Specification** - Four (4) conductor twisted pair overall shield is recommended to remain fully TIA-485 compliant at maximum supported baud rates and cable distances.

**NOTE** - It's possible to reuse existing Wiegand wiring for OSDP, however, using simple stranded cable typical of Wiegand readers generally does not meet the RS485 twisted pair recommendations.

**OSDP Multi-Drop** - Multi-drop gives you the capability to accommodate many readers by running one length of 4-conductor cable, eliminating the need to run wire for each wire.

**NOTE** - Four (4) is the maximum number of readers each port can support.

**NOTE** - Wiegand readers will not work when OSDP jumpers are installed.



Red | gate  
ethernet  
outdoor controller

Quick Start Guide



View the user manual here:  
[prodatakey.zendesk.com](http://prodatakey.zendesk.com)

**PN: RGE**

[www.prodatakey.com](http://www.prodatakey.com)  
801.317.8802