



RedTM | ethernet gate outdoor **controller**

Quick Start Guide

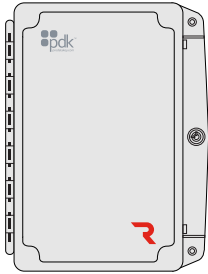


View the user manual here:
www.support.pdk.io

PN: RGE

www.prodatakey.com
801.317.8802

1. Package Contents



Red Gate Controller (1)



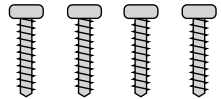
Battery Leads (1)



Jumpers (4)

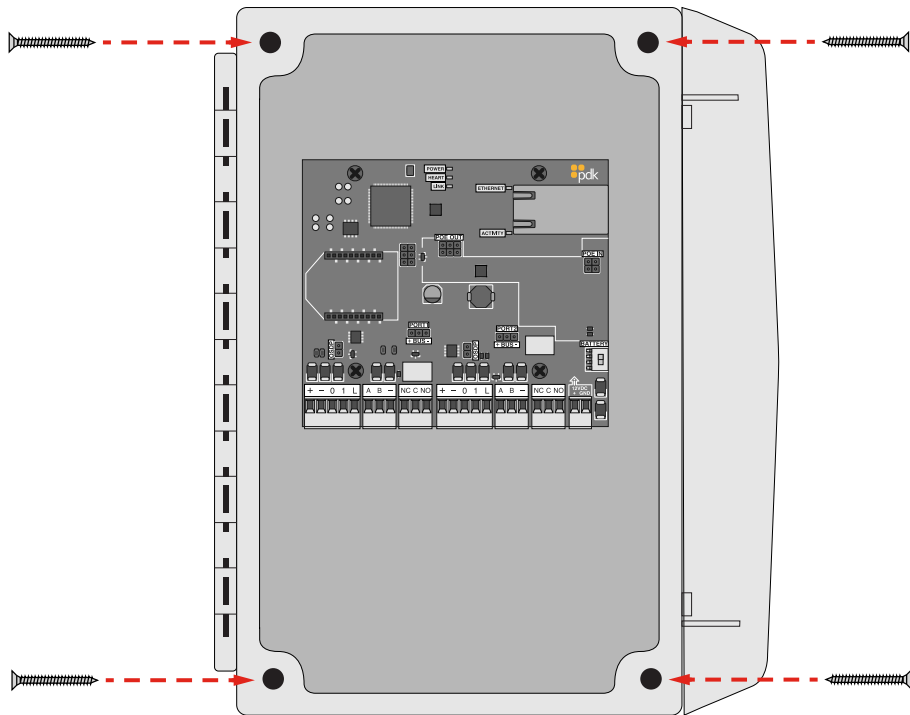


Diodes (2)



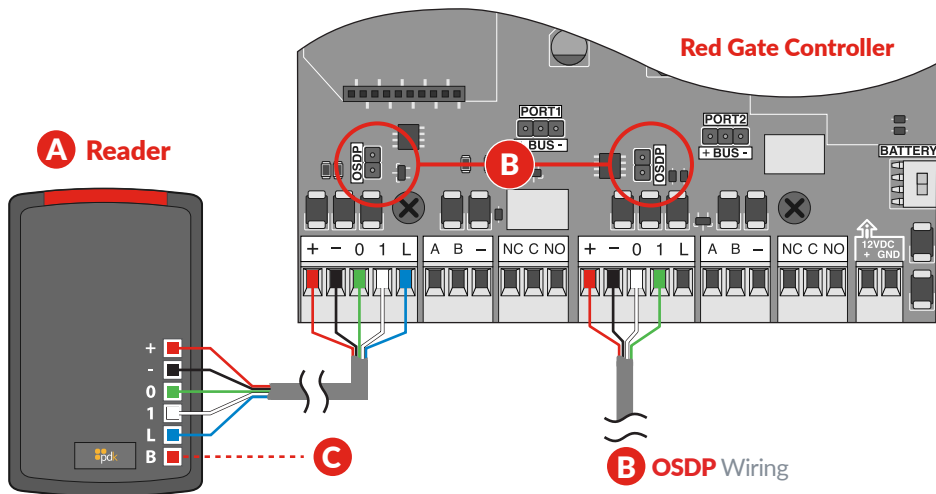
Enclosure Screws (4)

2. Mounting Controller



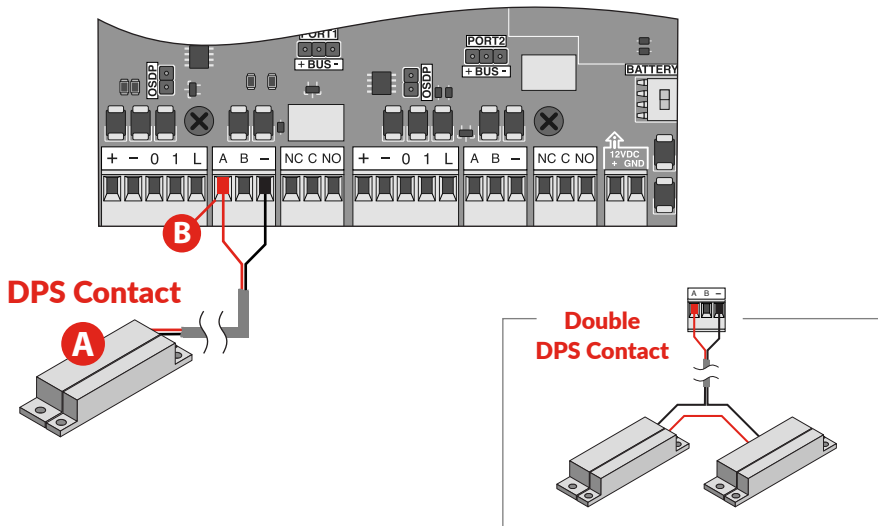
Mount - Mount the Red Gate enclosure securely to a wall.

3. Reader Connection



- A Reader** - The reader is mounted at the door with a 22/5 or 22/6 wire running 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 OSDP** - Place jumper(s) to enable OSDP (see reference guide for more information about OSDP.)
- C Piezo** - Can be connected to available relay and configured with software.

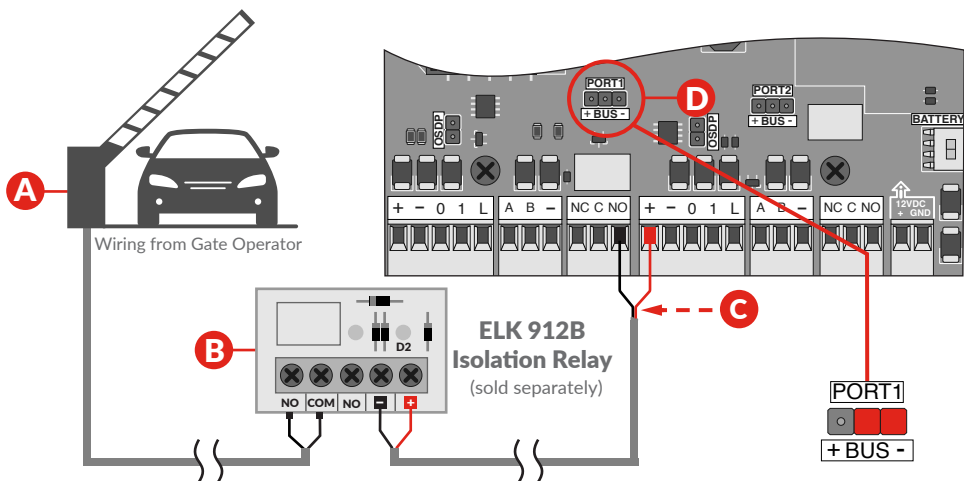
4. Input A / DPS Connection



A **DPS (Door Position Sensor)** - The DPS is mounted on the door frame with a 22/2 wire running from the DPS to the controller. Wire the DPS to the controller as shown above. For reporting double doors, wire the two door position in series and connect to the controller.

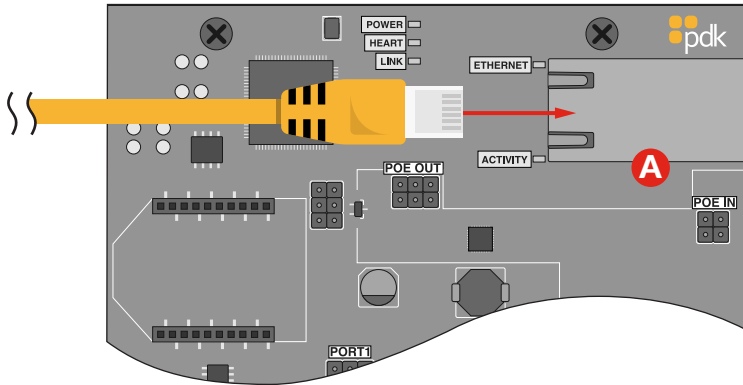
B **AUX Input** - A software rule can be programmed to trigger events or outputs based on input triggers.

6. Locking Relay



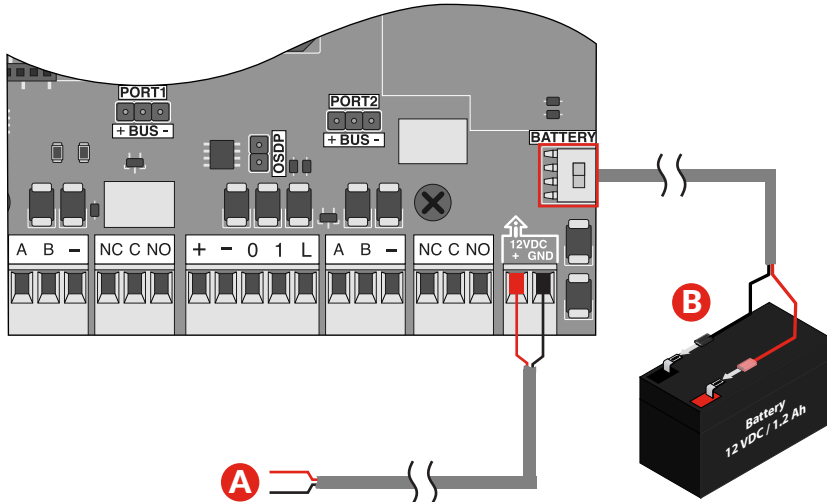
- A Gate Operator** - Follow the gate operator wiring instructions to connect the gate operator to an ELK 912B Isolation Relay.
- B Isolation Relay** - Installation of an ELK 912B isolation relay is recommended to prevent electrical damage to the Red Gate, The isolation relay is sold separately.
- C Locking Relay** - Connect the ELK 912B isolation relay to the controller by connecting the positive wire into a positive port and the negative wire into the NO port on the board.
- D Jumper Block** - Use to designated (+) or (-) board voltage out of NO and NC. If the jumper is off, the relay is a standard dry contact requiring an input into C on the relay 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 using IPV6. Alternatively, you may use IPV4 or assign a static IP using pdk.io if desired.

8. Power Connection



- A DC Input** - Input 12-24 VDC power using an 18/2 wire. When using a plug-in transformer, it is recommended to use surge protection in order to prevent lightning strikes, power surges, harmonics, dirty power or other power situations that may render the controller inoperable. For high voltage applications, use the High Voltage Converter (PN: HVC).
- B Backup Battery** - The enclosure will fit most 12 VDC 8 Ah batteries. Connect the battery to the controller using the supplied battery leads.

Reference Guide

Fire Input - To integrate the fire system into a controller, refer to wiring diagrams at www.support.pdk.io

Programming - After the controller is connected, access the configuration software as instructed in the programming manual available at www.support.pdk.io

Reader Compatibility - PDK does not require proprietary readers. Controllers accept a Wiegand input, including biometric readers and keypads. OSDP readers are supported by using included jumper (see OSDP reference guide). Contact PDK support if assistance is needed.

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

PDK Knowledge Base: www.support.pdk.io

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-conductor twisted-pair with overall shield is recommended to remain fully TIA-485 compliant at the 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 four-conductor cable, eliminating the need to run wire for each wire.

NOTE - The maximum number of readers each port can support is four.

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