1. Package Contents

Red Cloud Node Controller (1)

Key lock (1)

Diode (1)

Battery Leads (1)

Jumpers (2)

Labels (2)

Enclosure Screws (2)

Transformer (1)
14 VDC, 2 Amp
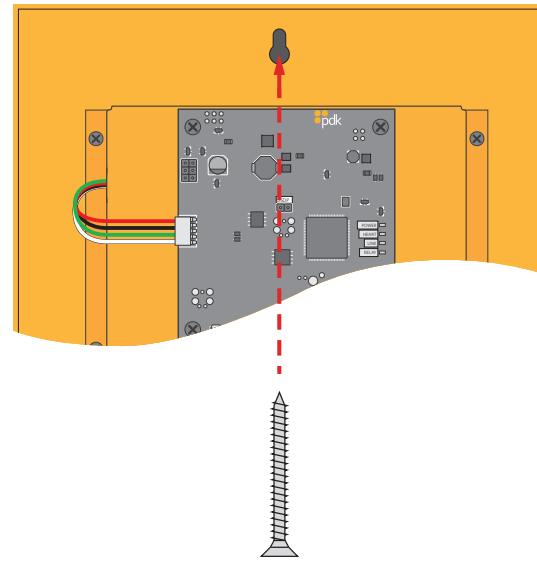
2. Mounting Controller

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

3. Reader Connection
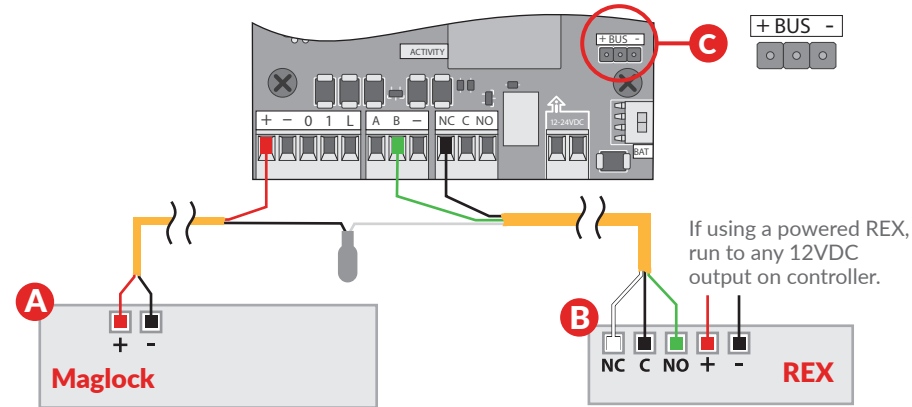

Red 1 Controller

A Reader
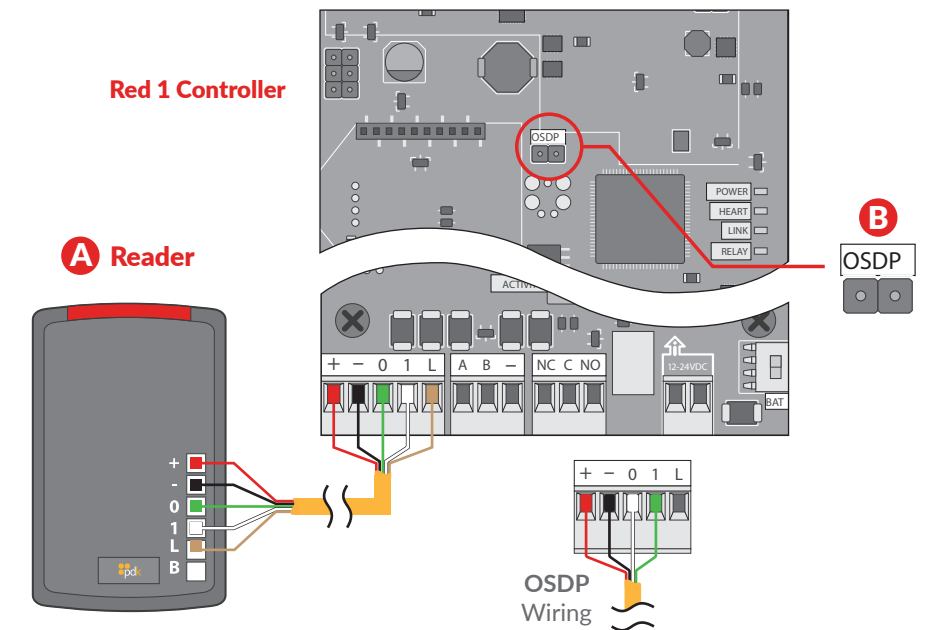
OSDP
Wiring

A **Reader** - The 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 controller.

B **OSDP** - Place jumper to enable OSDP (see OSDP reference guide at the end of this guide for more info)

4. Input A / DPS Connection


DPS Contact

Double DPS Contact
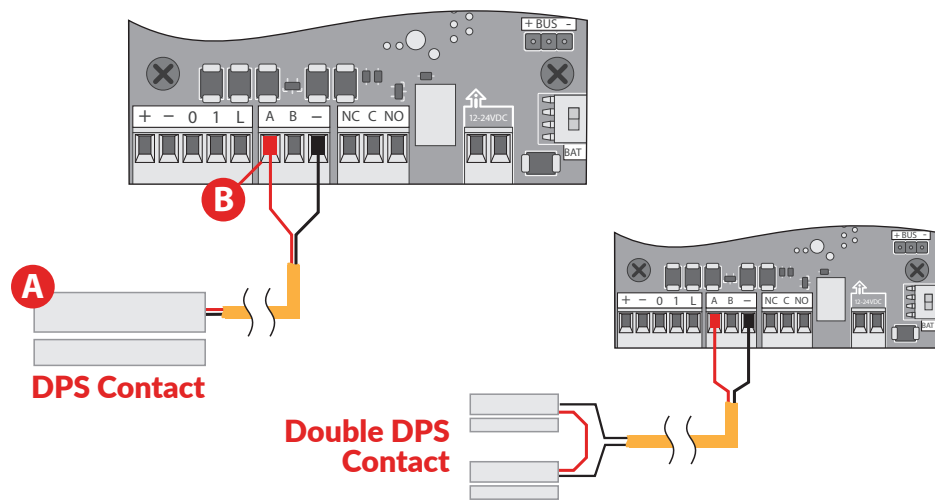
A **DPS (Door Position Switch)** - The DPS is mounted on the door frame in the desired location with a 22/2 wire running from the DPS to the controller. Wire the DPS to the controller as shown above. When using two DPS sensors for double doors you will wire them in series with only two conductors running back to the controller for connection.

B **AUX Input** - A rule can be setup to trigger events or outputs based on this input trigger.

5. Input B / REX Connection

Maglock

If using a powered REX, run to any 12VDC output on controller.

REX

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 Block** - Use to designate (+) or (-) board voltage out of NO and NC. If jumper is off, the relay is a standard dry contact needing input into

✳ **B Input** - A rule can be setup to trigger events or outputs based on this input trigger.

6. Locking Relay
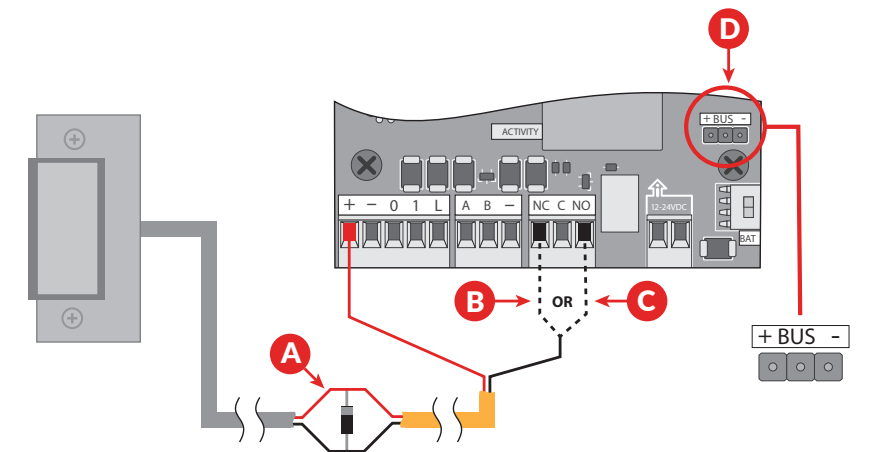
A **Diode** - The provided diode must be installed when using a strike. Install at the strike with the grey stripe of diode on positive and the black on negative.

B **NC** - Used for maglocks (or strikes in fail-safe configuration). Connect the negative (-) of the maglock or strike to NC on the door controller.

C **NO** - Used for strikes in fail-secure configuration. Connect the negative (-) of the strike to NO on the door controller.

D **Jumper Block** - Use to designate (+) or (-) board voltage out of NO and NC. If jumper is off, the relay is a standard dry contact needing input into

7. Communication Connections
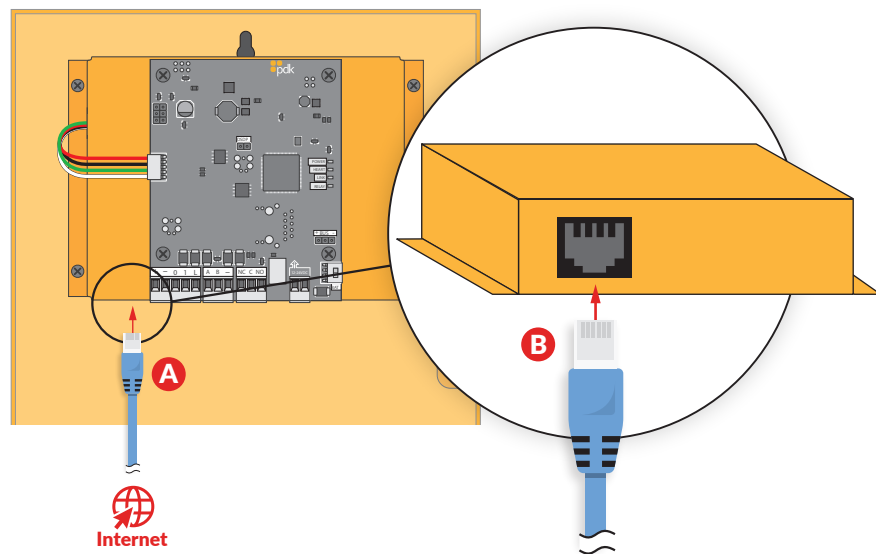
A **Network** - A live Internet connection is required to program and manage the Red Cloud Node.

8. Power Connection
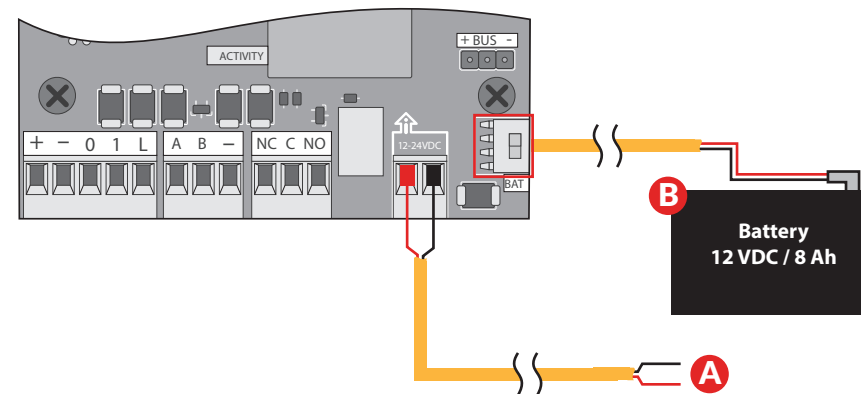
A **DC INPUT** - Use included 14 VDC, 2 amp transformer for DC power input. It is recommended to use 18/2 wire. For high voltage applications, use the HV Converter (PN: HVC).

B **BATTERY** - The enclosure will fit most 12 VDC 8 Ah batteries. The battery is connected with supplied leads and is polarity sensitive. Receive up to 8 hrs of battery backup using a strike in fail-secure.

9. Cloud Node Registration

A Login to your account at pdk.io and click the plus icon ⊕ next to

B Customers.

C Enter the customer name and click Create.

D Select the customer and then click the plus icon ⊕ next to Cloud Nodes.

E Enter the Cloud Node serial number and a name, then click Register.

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.

Reference Guide

Fire Input - To integrate the fire system using a Red CN door controller, refer to wiring diagrams in the Partner Portal at www.prodatakey.com/resources

Programming - After the Red CN door controller has been connected back to the Cloud Node, access the configuration software as instructed in the programming manual. This manual is available for download through the Partner Portal at www.prodatakey.com/pdkio

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').
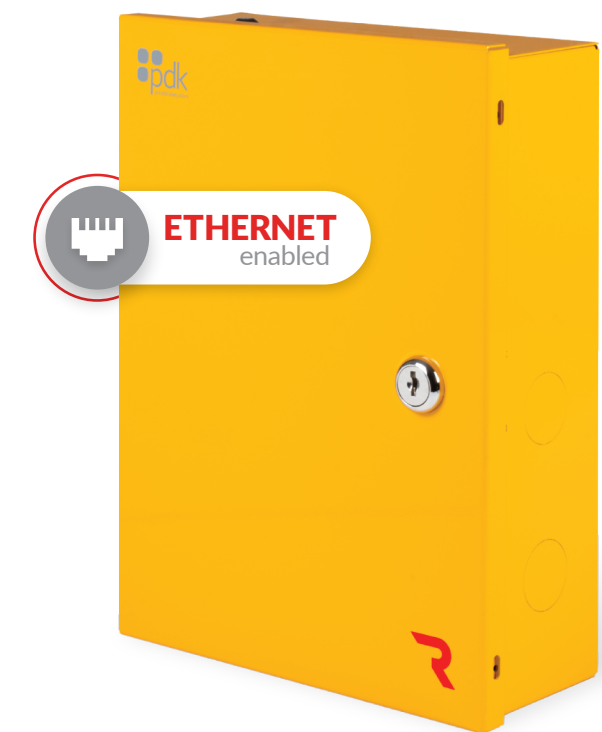
Part Number - RCNE

PDK Technical Support
Phone: 801.317.8802 option #2
Email: support@prodatakey.com
PDK Knowledge Base: prodatakey.zendesk.com

Red | CN
cloud **node**

Quick Start **Guide**

ETHERNET enabled

View the user manual here:
prodatakey.zendesk.com

PN: RCNE

www.prodatakey.com
801.317.8802