



[ProdataKey, Inc.](#) > [RED SERIES HARDWARE](#) > [Red 1 High-Security Controller](#)

 Search

Articles in this section



Red 1 User Manual

2 months ago · Updated



Red 1 Manual

Rev: 1.0.3

Support

One Door Controller - **Part Number: R1**

Table of Contents

Installation

Safety

Installation

This manual provides instructions for installing the ProdataKey **Red 1** controller. Before you begin the installation, read the instructions thoroughly. Make sure you have read and understood the Safety Information.

WARNING: Disconnect power before working with the ProdataKey product. DO NOT mount the product while power is applied. Always apply power at the *end* of the installation after verifying wiring connections are correct; incorrect wiring could cause damage to the product.

IMPORTANT: A ProdataKey Cloud Node is required to operate the **Red 1** controller.

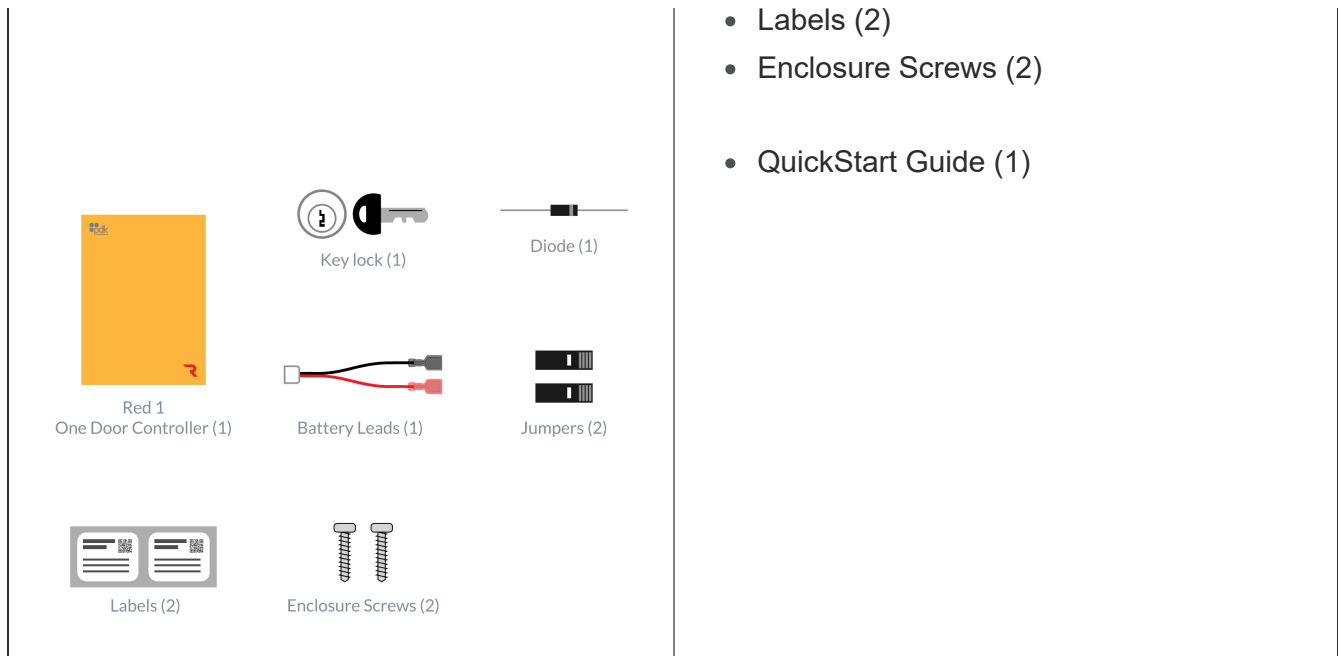
IMPORTANT NOTICES:

- 1: For UL294 installation compliance, the Red 1 Controller must be installed in a secured location.
- 2: Unless the HV Converter (HVC) hardware is used, do not connect the power supply Transformer to a receptacle controlled by a switch.
- 3: The wiring shall be in accordance with the National Electrical Code, ANSI/NFPA 70.

Package Contents

Red 1 comes standard with Ethernet as well as an onboard power supply that is built into the controller. Optional wireless and PoE modules are also available and may be purchased separately.

	• Red 1 Controller • Battery Leads (1) • Jumpers (2) • Diodes (1) • Key Lock (1)	Support
--	---	----------------



Recommended Tools

- Drill and the appropriate size drill bit
- Phillips / Slotted screwdriver (to match screw heads)
- Wall anchors (2) if mounting to drywall
- Pencil (to mark hole positions on the mounting surface)
- Wire crimper/stripper

Specifications

Connections

- Removable screw-down terminals
- Polarized DC-only Power Supply Input
- Industrial-grade 2Amp Form-C Relay
- Reader Input
- Input A
- Input B
- Additional power and ground connections for devices other than door connectors

Communication Options

- Ethernet
- WiMAC wireless mesh (2.4 GHz / 802.15.4)
- Encryption: AES 128-bit
- Wireless Range: 1-mile line of sight / 450 ft. indoor average

Support

Environmental

- Temperature: -20°C ~ +60°C / -4°F ~ +140°F
- Humidity: 0%–95% relative humidity noncondensing

Enclosure

- Dimensions (W x H x D) 10.4375" x 7.625" x 3"
- Metal lockable security can (indoor use only)

Weight

- 3 lbs

Compliance

- Conforms to UL 294

Requirements

Power

- 12V–24V DC Input
- 14 VDC 2 Amp 28 Watt Class-2 power supply (Input supply to the board)
- Powers readers and other door hardware directly from the bus

** Battery not included, but a backup battery must be installed to comply with UL 294.*

Mounting Instructions

- Mount the **Red 1** and Cloud Node above the door frame or higher where possible.
- Install the **Red 1** and Cloud Node in an environmentally controlled and secure area.

These instructions allow you to easily fasten the box properly and securely to a wall surface. Prior to beginning, ensure you have the package contents, tools, and necessary materials for the installation on an appropriate surface (i.e., drywall, wood).

- Use the **Red 1** box to mark the hole positions on the wall, and drill holes into the surface. If mounting onto drywall, insert the anchors into the holes to secure the screws to the surface.

Support

- Align the enclosure's holes to the holes in the wall surface and mount the controller box with the screws so the box is securely fastened to the wall.

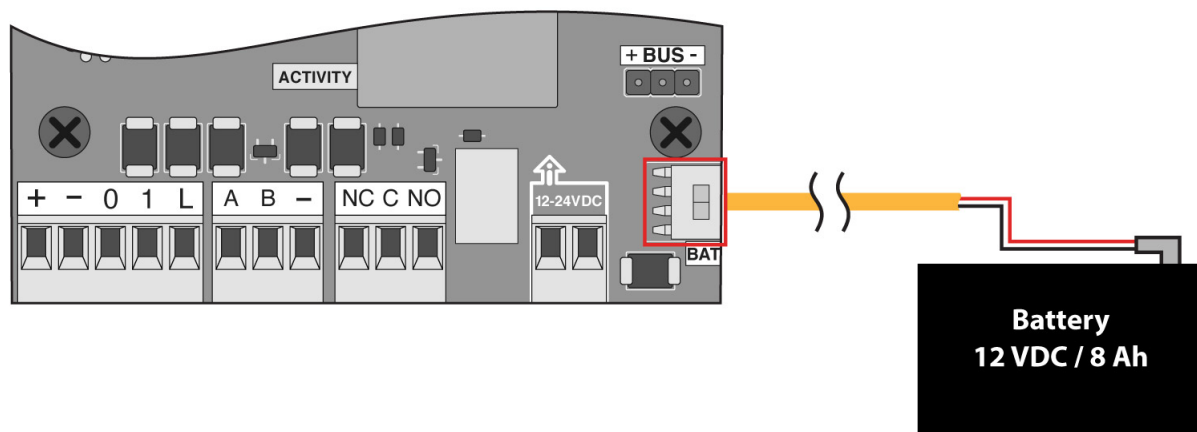
Power / Battery

Using a battery that meets the following specifications will provide at least 30 minutes of backup power in the event of an AC power loss:

- **Recommended Battery Type:** 12 VDC 8 Ah lead-acid battery
- **Recommended Battery Size:** 4" x 3.5" x 3" (L H W)
- **Max Battery Dimensions:** 6" x 5" x 4" (L H W)

A backup battery is HIGHLY recommended to prevent system failure in the event of an AC power loss. When a backup battery is not used, a loss of AC power will cause a loss of output voltage. A backup battery must be installed in order to comply with UL 294.

Add the 12V DC 8 Ah battery, attaching the wires from the battery to the circuit board battery terminal (illustration below).



The onboard power supply is a 14.0V 2A 28-watt, class-2 power supply. This connection is polarity sensitive, meaning that it has fixed positive and negative connections. From the onboard power supply, connect a red 18/2 wire from the positive (+) DC terminal to the positive (+) Cloud Node connector. Connect a black 18/2 wire from the onboard power supply negative (-) DC terminal to the negative (-) Cloud Node connector (A/1 in the illustrations above).

NOTE: DO NOT connect the backup battery until ALL wiring is completed and verified; incorrect wiring could cause damage to the product.

For information about connecting other wires, such as power wires to third-party locks, readers, and other devices, see the respective manufacturers' instructions.

Support

If you have any questions or need help with installation or with any of the hardware described in this manual, please

feel free to contact the ProdataKey **Technical Support** staff at 801.317.8802

Battery Maintenance, Replacement, & Disposal

The Red 1 controller features a battery charger and constantly monitors the battery's health and statistics.

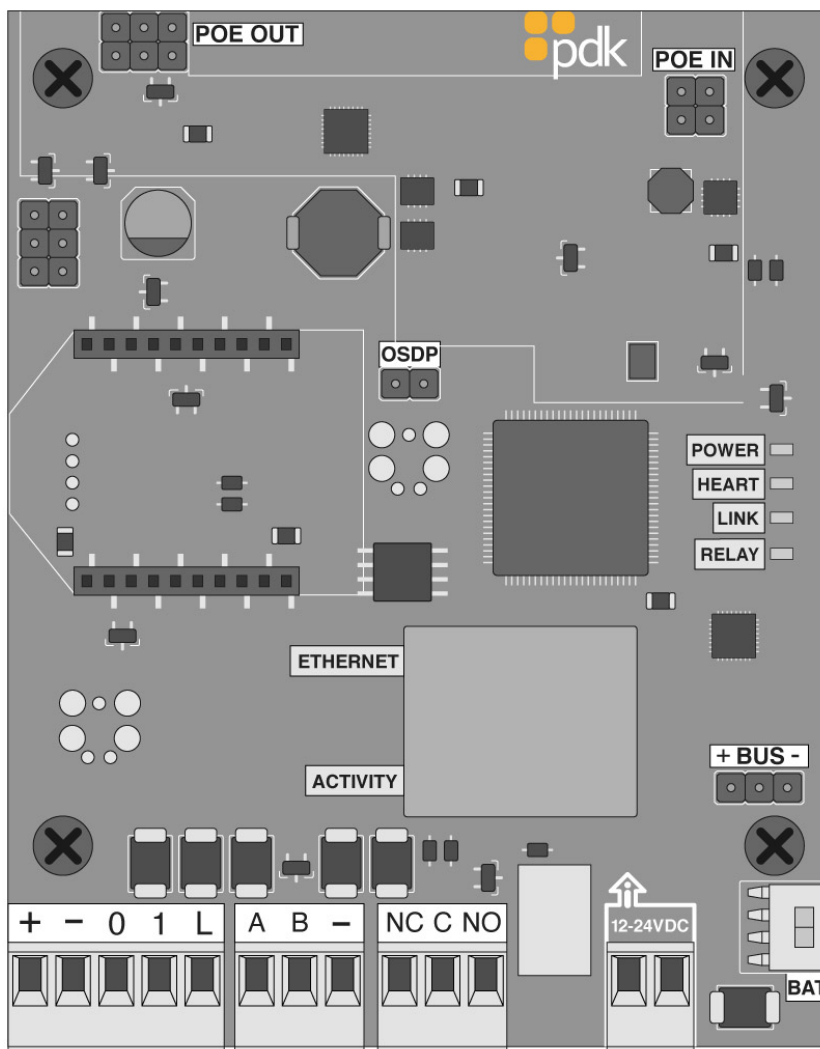
Check the battery regularly and replace it only with an identical battery or a ProdataKey recommended battery.

Dispose of used batteries according to local regulations or the battery manufacturer's instructions.

IMPORTANT: There is a risk of a battery explosion if the battery is incorrectly replaced.

Connections

Standard Ethernet Board - An Ethernet connection is the standard default **Red 1** option.

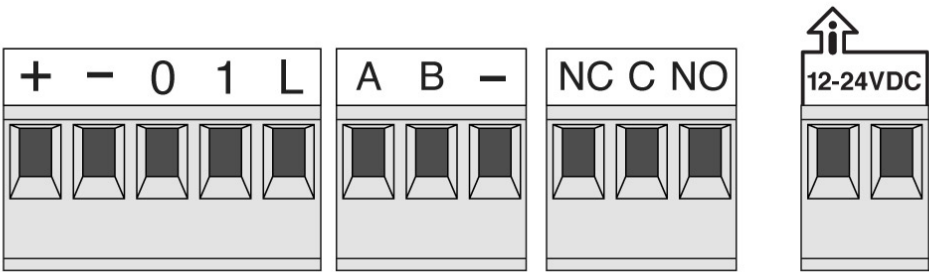


Support

Legend					
(+)	Positive	A	DPS Input	NC	Normally Closed
(-)	Ground	B	REX Input	C	Common
0	Reader Data 0	(-)	Ground	NO	Normally Open
1	Reader Data 1				
L	Reader LED Trigger				

Connectors

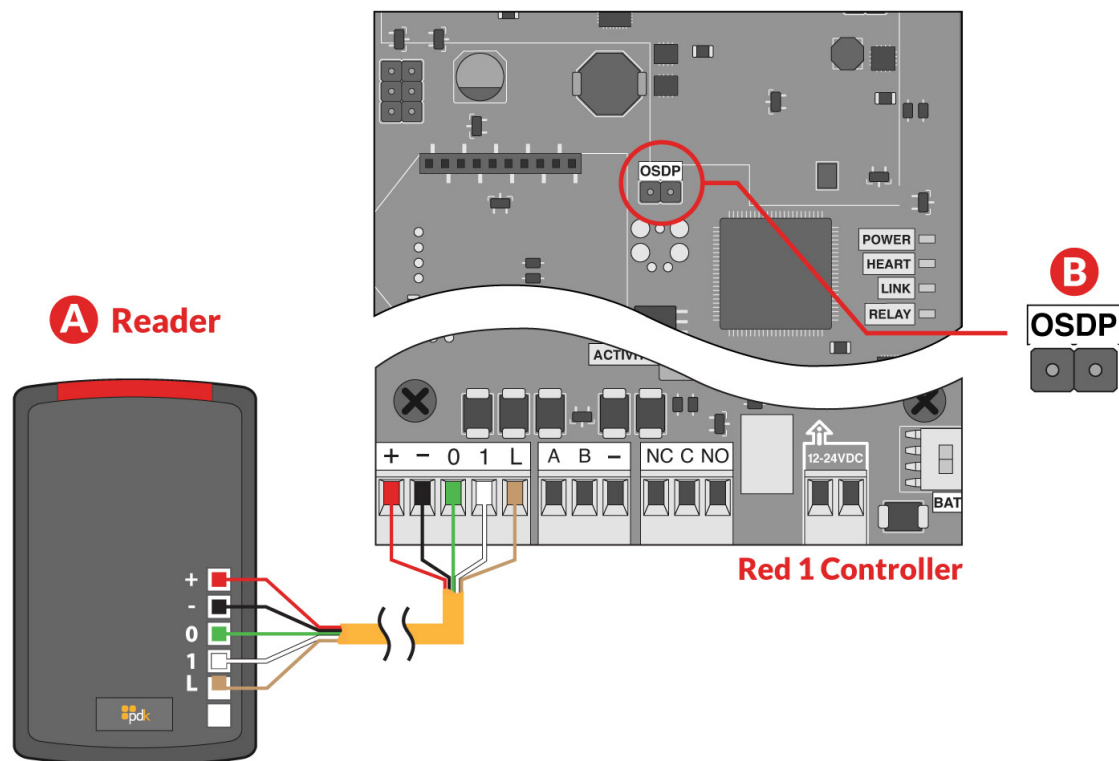
This section describes the Red 1 connector's technical specifications.



The voltage end connector will be 12/24VDC.

Reader Connection

This section describes the Red 1 connector's technical specifications.



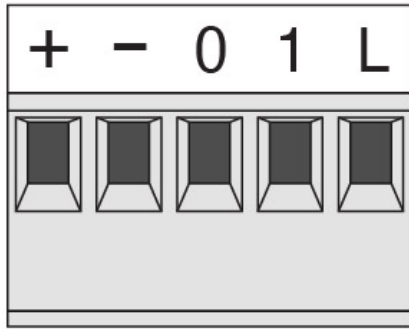
(A) Main Reader - The main reader is mounted at the door with a 22/5 or 22/6 wire ran to the door controller. Wire the reader to the controller as shown above. Be sure to check polarity and voltage prior to powering the controller.

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

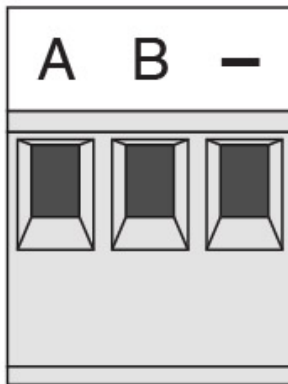
NOTE: For UL-certified wire installations, all wire running from a door controller to a lock, strike, or reader device must be less than 98.5 feet (30 meters).

NOTE: Use the following reference for wiring a reader to the io board.

- **Red:** to + (positive) connector
- **Black:** to - (negative) connector
- **Green:** to 0 (zero) connector
- **White:** to 1 connector
- **Brown:** to L connector

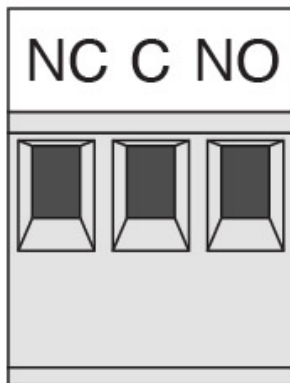


5-Pin Connector	Port	PIN	Notes
Power Output	+	1	Positive 12VDC Out
Power Output	-	2	Negative 12VDC Out
Reader Data	0	3	Input Data 0 / OSDP B
Reader Data	1	4	Input Data 1 / OSDP A
Reader LED Trigger	L	5	Reader LED Output Trigger



3-Pin Connector	Port	PIN	Notes
DPS Input	A	1	Door Position Switch or assignable
REX Input	B	2	Request to Exit or assignable. Output 0 (NO or NC and + or - selectable)
Ground	-	3	Ground

Support



3-Pin Connector	Port	PIN	Notes
Normally Closed	NC	1	Normally closed connection for main form C relay with optional jumper configuration for wet positive (+) or negative (-) output.
Common	C	2	Common connection for main form C relay.
Normally Open	NO	3	Normally open connection for main form C relay with optional jumper configuration for wet positive (+) or negative (-) output.

Power Port Connector

Power into the controller board is polarity sensitive, meaning that it has fixed positive and negative connections.



Support

2-Pin Connector	Port	PIN	Notes
Controller Power Input	+	1	12/24 VDC Positive
Controller Power Input	-	2	12/24 VDC Negative

Board Systems LED Indicators

Wireless LED indicators are shown on the controller board for LINK, HEART, ETHERNET, and ACTIVITY.

LED	Light	Status
POWER	On	Board is powered up
POWER	Off	No power to board.
HEART	Flashing	Normal operation.
HEART	Solid On	Possible serious hardware function. Call Support.
LINK	Solid On	No connection.
LINK	Solid Off	The connection is good.
ETHERNET	Orange	The connection is communicating at 100mbps
ETHERNET	Green	The connection is communicating at 1000mbps/1gbps
ACTIVITY	Off	There is no connection to a network through the cable.
ACTIVITY	Green	There is an active connection to a network through the cable.
RELAY	On / Off	Relay is On or Off.

Wiring

NOTE: For UL-certified wire installations, all wire running from a **Red 1** door controller to a lock, strike, or reader device must be less than 98.5 feet (30 meters).

- Strip the wire ends as required.
- Install the reader, and attach the wires, meeting your reader configurations. See **Wiring Diagrams** for additional information.
- Connect the wires between the door controller and locks and any other devices.

NOTE: For information about the connectors and their specifications and diagrams, refer to the appropriate wiring diagrams: Maglock, Door Strike (Fail-Secure), and Door Strike (Fail-Safe).

Support

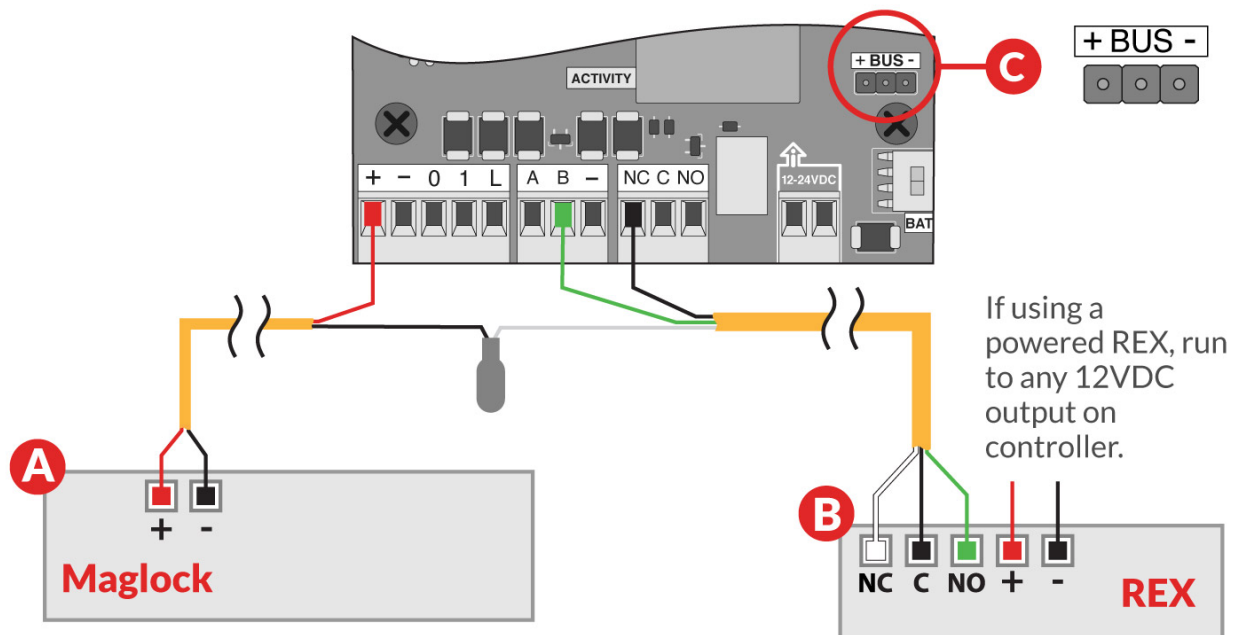
Recommended Wiring Dimensions

Use 26 gauge minimum, 18 gauge maximum, stranded for general wiring. Wiring methods shall be in accordance with the National Electrical Code, ANSI/NFPA 70. Follow these recommended wiring sizes.

Wiring For	Recommended Size
Power Input	18 gauge 2 conductors (18/2) wire
Reader	22 gauge 6 conductors (22/6) wire
Strike / Maglock	18 gauge 2 conductors (18/2) wire
REX	18 gauge 4 conductors (18/4) wire
OSDP Reader	22 gauge 6 conductors Twisted-Pair (22/6) wire

Maglock/Exit Device Wiring Diagram

A magnetic lock, or maglock, is a locking device that consists of an electromagnet and an armature plate. Locking devices can be either "fail-safe" or "fail-secure". The electromagnet portion of the lock is typically attached to the door frame; a mating armature plate is attached to the door. The two components are in contact when the door is closed. When the electromagnet is energized, a current passing through the electromagnet causes the plate to attract the electromagnet, creating a locking action.



NOTE: For UL-certified wire installations, all wire running from a door controller to a lock, strike, or reader device must be less than 98.5 feet (30 meters).

(A) Maglock: When installing a maglock, it is required to install an electronic REX (request to exit,

Support

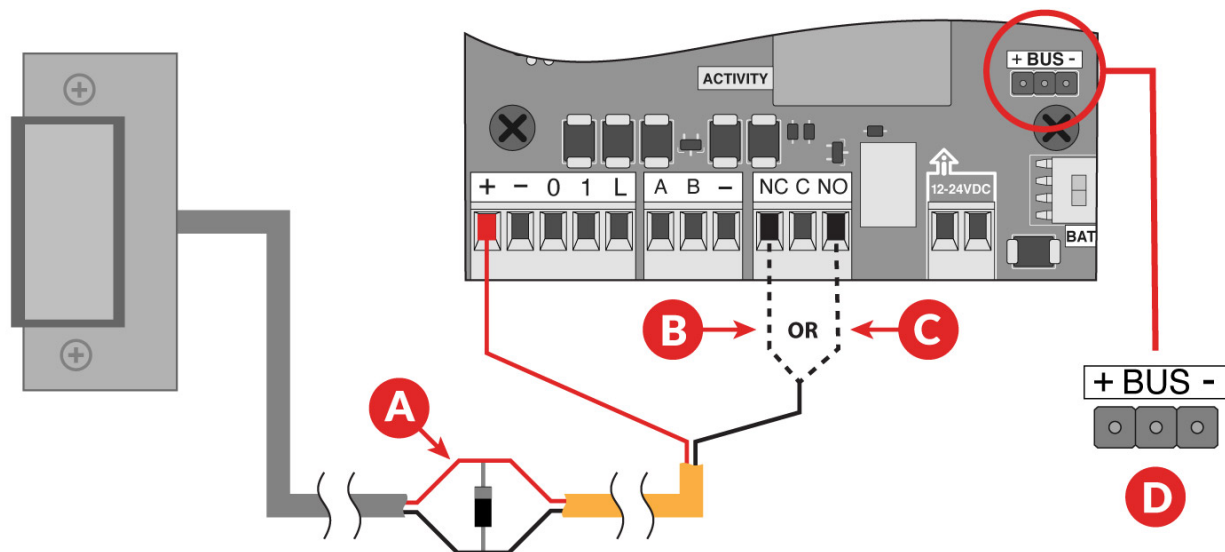
a mechanical button at the same door (in case of electrical failure) for free egress. Run 18/2 wire connections from the maglock to the door controller.

(B) REX/Exit Device: Mounted in the desired location with 18/5 wire running from the REX to the controller (18/3 wire if non-powered REX). Wire the REX to the controller and maglock. If using a powered REX, run to any 12VDC output on the controller. (If reporting is not needed in the system, simply eliminate the dashed wire.)

NOTE: It is not recommended to power third-party devices to the io board. Use a separate external power supply when wiring the exit device.

(C) Jumper: Use the designated positive (+) or negative (-) board voltage out of (NO) and (NC). If the jumper is off, the relay is a standard “dry contact” needing input into common. In this diagram, the jumper is placed on the right (-) and center pin to operate the maglock.

Locking Relay Wiring Diagram



(A) Diode: The provided diode MUST be installed when using a strike. Install at the strike with the stripe of the diode on positive (+) and the black on negative (-).

IMPORTANT: The diode MUST be installed as close to the lock as possible. The best scenario (if possible) is directly across the screw terminals on the lock (as shown in the first image). Another option is to splice the diode in parallel (shown in image two), connecting it to the positive (+) and negative (-) strike wires using dolphin connectors, and crimp the wires. For questions or detailed information, please contact the ProdataKey [Support](#) staff.

(B) NC: Normally Closed—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: Normally Open—Used for strikes in the fail-secure configuration. Connect the negative (-) of the strike to

Support

NO on the door controller.

(D) Jumper: Used to designate (+) or (-) board voltage out of NO and NC. If the jumper is off, the relay is a standard “dry contact” needing input into common. In this diagram, the jumper is placed on (-) side to operate the strike.

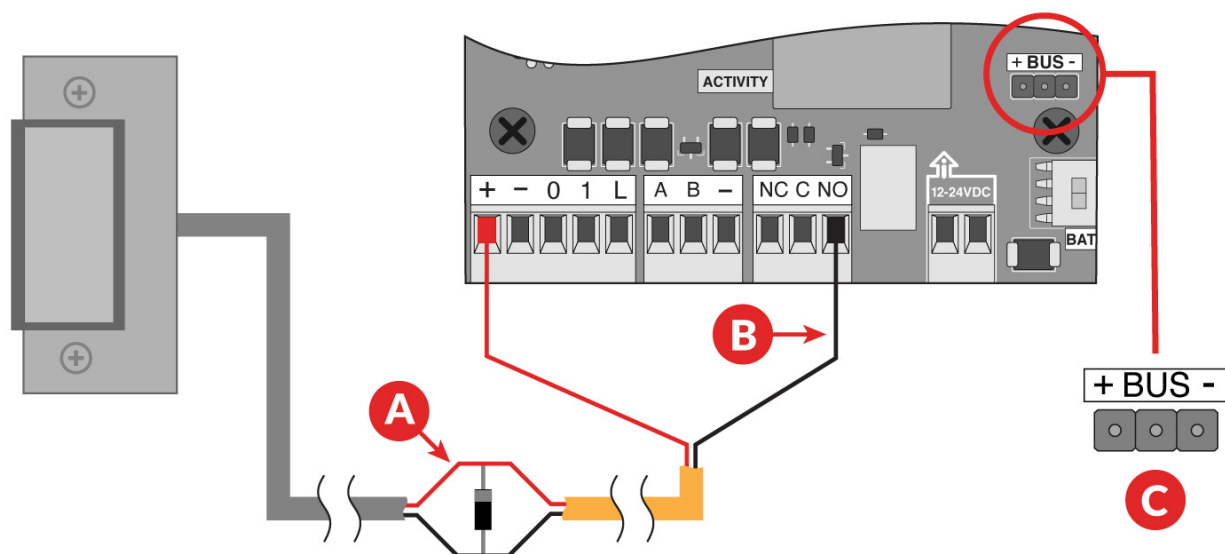
Diode Setup

A diode is a standard semiconductor device integral to the safe and proper function of the door controller. It acts as a grounding tool, allowing the flow of current in one direction only. When a door strike is called/requested/sent, the coil sends a spike (also called “kickback voltage”) down the line with as much as 50,000 volts. Without a diode semiconductor, this kickback voltage would damage the control equipment. When properly installed, the diode keeps kickback voltage localized at the lock.

To protect your equipment against electrical kickback, the diode must be installed across the DC-powered lock, at the strike, between positive (+) and ground (-). DC voltage is polarized, meaning that it has fixed positive and negative connections. The diode must be installed in the direction shown in the illustrations: gray stripe to positive (+), black to negative or ground (-).

Fail-Secure Door Strike Wiring Diagram

Locking devices can be either “fail-safe” or “fail-secure”. A fail-secure locking device remains locked when power is lost. An electric strike replaces the fixed strike faceplate often used with a latch bar. It normally presents a ramped surface to the locking latch allowing the door to close and latch just like a fixed strike.



Support

(A) Diode: The provided diode MUST be installed when using a strike. Install at the strike with the stripe on the

diode on positive (+) and the black on negative (-).

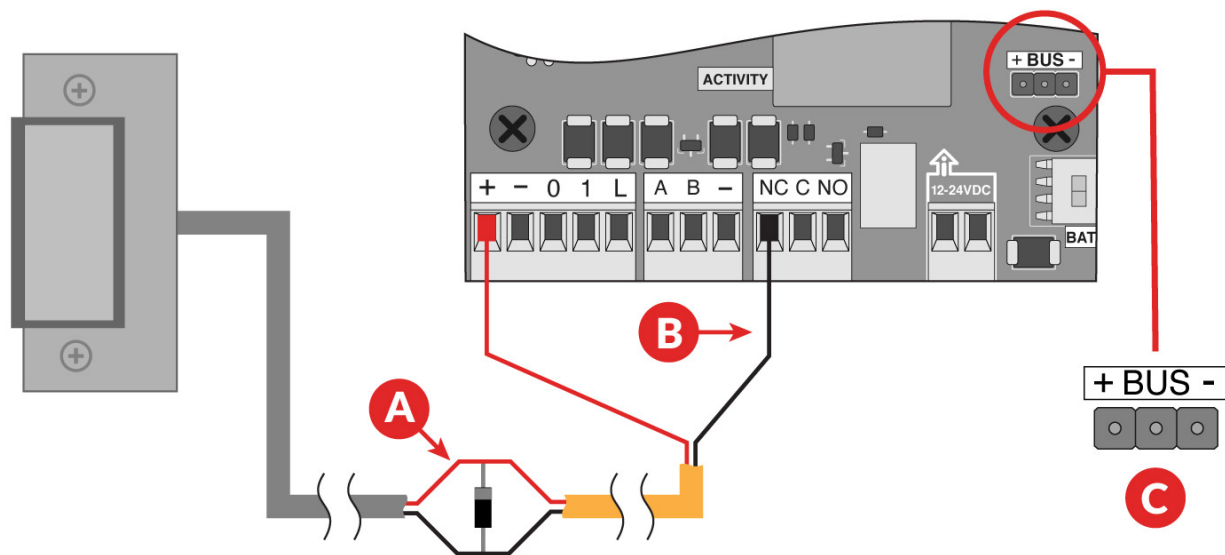
IMPORTANT: The diode MUST be installed as close to the lock as possible. The best scenario (if possible) is directly across the screw terminals on the lock (shown in the first image). Another option is to splice the diode in parallel (shown in image two), connecting it to the positive (+) and negative (-) strike wires using dolphin connectors, and crimp the wires. For questions or detailed information, please contact the ProdataKey Support staff at 801.317.8802.

(B) NO: Normally Open - Used for maglocks (or strikes in fail-safe configuration). Connect the negative (-) of the maglock or strike to NC (Normally Closed) on the door controller.

(C) Jumper: Use the designated positive (+) or negative (-) board voltage out of (NO) and (NC). If the jumper is off, the relay is a standard “dry contact” needing input into common. In this diagram, the jumper is placed on the negative (-) and center pin to operate the maglock.

Fail-Safe Door Strike Wiring Diagram

Locking devices can be either "fail-safe" or "fail-secure". A fail-safe locking device unlocks when power is lost. An electric strike replaces the fixed-strike faceplate often used with a latch bar. It normally presents a ramped surface to the locking latch allowing the door to close and latch just like a fixed strike.



(A) Diode: The provided diode MUST be installed when using a strike. Install at the strike with the stripe of the diode on positive (+) and the black on negative (-).

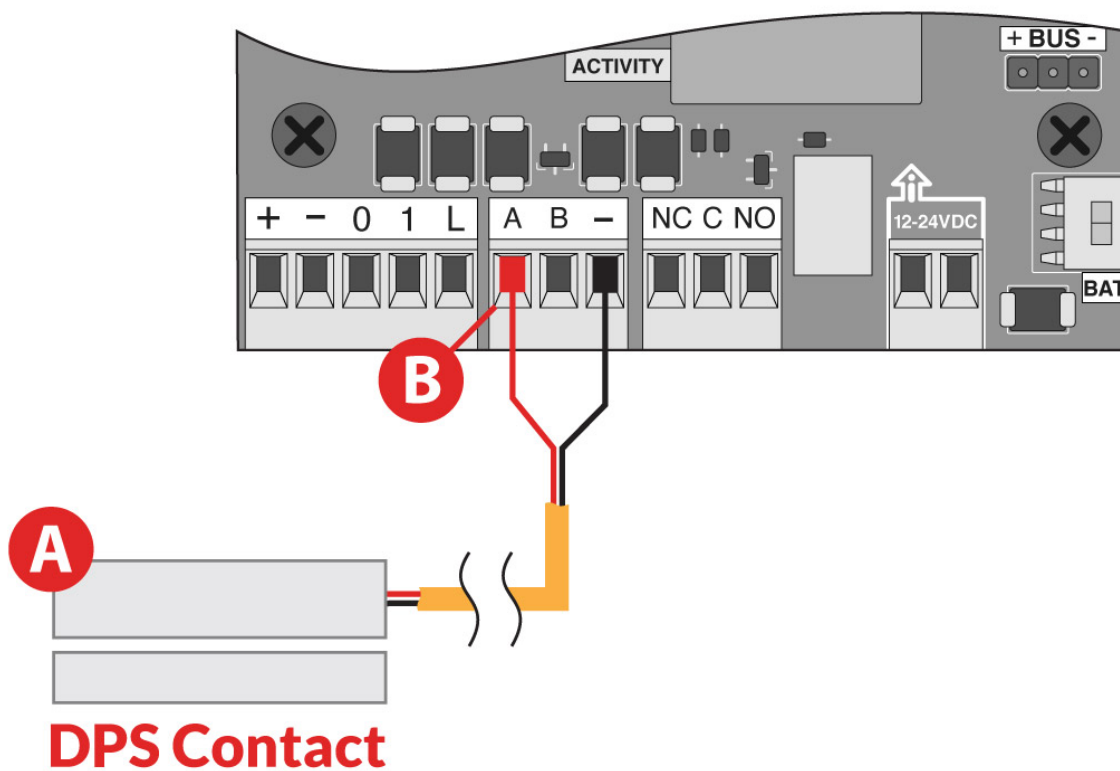
IMPORTANT: The diode MUST be installed as close to the lock as possible. The best scenario (if possible) is directly across the screw terminals on the lock (as shown in the first image). Another option is to splice the diode in parallel (shown in image two), connecting it to the positive (+) and negative (-) strike wires using connectors, and crimp the wires.

Support

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

(C) Jumper: Use the designated positive (+) or negative (-) board voltage out of (NO) and (NC). If the jumper is off, the relay is a standard “dry contact” needing input into common. In this diagram, the jumper is placed on the negative (-) and center pin to operate the maglock.

Door Position Sensor (DPS) Wiring Diagram



(A) DPS: The Door Position Sensor is mounted on the door frame in the desired location with a 22/2 wire running from the DPS to the controller. (When using two DPS sensors for double doors, wire them in series with only two conductors running back to the controller.)

(B) Input A: Rule-based inputs can be triggered by using the (A) input for something other than DPS.

NOTE: When input receives a negative (-) connection from the controller, the input is triggered until the negative is dropped. A rule can be set up to trigger any output based on this input trigger.

FCC Compliance Statement: This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Product can be used without license conditions or restrictions in all European Union countries, including Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Luxembourg, The Netherlands, Portugal, Spain, Sweden, and the United Kingdom, as well as other non-EU countries, including Iceland, Norway, and Switzerland.

UL 294

Section 8:

Feature	Level
Destructive Attack Level	II
Line Security	II
Endurance Level	IV
Standby Power	II

Safety, Maintenance, & Operational Information

Requirements

This manual is intended for trained and authorized installers of ProdataKey access control products. PDK Cloud Nodes require firmware version 1.6.4.

Updated versions of this document will be posted to the ProdataKey website, as required. Other user manuals are also available on the ProdataKey website's Document Library.

In this manual, ProdataKey and its door controllers are referred to as the PDK products, **Red 1**, **Red 2**, **Red 3**, **Red 4**, **Red 5**, **Red 6**, **Red 7**, **Red 8**, **Red 9**, **Red 10**, **Red 11**, **Red 12**, **Red 13**, **Red 14**, **Red 15**, **Red 16**, **Red 17**, **Red 18**, **Red 19**, **Red 20**, **Red 21**, **Red 22**, **Red 23**, **Red 24**, **Red 25**, **Red 26**, **Red 27**, **Red 28**, **Red 29**, **Red 30**, **Red 31**, **Red 32**, **Red 33**, **Red 34**, **Red 35**, **Red 36**, **Red 37**, **Red 38**, **Red 39**, **Red 40**, **Red 41**, **Red 42**, **Red 43**, **Red 44**, **Red 45**, **Red 46**, **Red 47**, **Red 48**, **Red 49**, **Red 50**, **Red 51**, **Red 52**, **Red 53**, **Red 54**, **Red 55**, **Red 56**, **Red 57**, **Red 58**, **Red 59**, **Red 60**, **Red 61**, **Red 62**, **Red 63**, **Red 64**, **Red 65**, **Red 66**, **Red 67**, **Red 68**, **Red 69**, **Red 70**, **Red 71**, **Red 72**, **Red 73**, **Red 74**, **Red 75**, **Red 76**, **Red 77**, **Red 78**, **Red 79**, **Red 80**, **Red 81**, **Red 82**, **Red 83**, **Red 84**, **Red 85**, **Red 86**, **Red 87**, **Red 88**, **Red 89**, **Red 90**, **Red 91**, **Red 92**, **Red 93**, **Red 94**, **Red 95**, **Red 96**, **Red 97**, **Red 98**, **Red 99**, **Red 100**, **Red 101**, **Red 102**, **Red 103**, **Red 104**, **Red 105**, **Red 106**, **Red 107**, **Red 108**, **Red 109**, **Red 110**, **Red 111**, **Red 112**, **Red 113**, **Red 114**, **Red 115**, **Red 116**, **Red 117**, **Red 118**, **Red 119**, **Red 120**, **Red 121**, **Red 122**, **Red 123**, **Red 124**, **Red 125**, **Red 126**, **Red 127**, **Red 128**, **Red 129**, **Red 130**, **Red 131**, **Red 132**, **Red 133**, **Red 134**, **Red 135**, **Red 136**, **Red 137**, **Red 138**, **Red 139**, **Red 140**, **Red 141**, **Red 142**, **Red 143**, **Red 144**, **Red 145**, **Red 146**, **Red 147**, **Red 148**, **Red 149**, **Red 150**, **Red 151**, **Red 152**, **Red 153**, **Red 154**, **Red 155**, **Red 156**, **Red 157**, **Red 158**, **Red 159**, **Red 160**, **Red 161**, **Red 162**, **Red 163**, **Red 164**, **Red 165**, **Red 166**, **Red 167**, **Red 168**, **Red 169**, **Red 170**, **Red 171**, **Red 172**, **Red 173**, **Red 174**, **Red 175**, **Red 176**, **Red 177**, **Red 178**, **Red 179**, **Red 180**, **Red 181**, **Red 182**, **Red 183**, **Red 184**, **Red 185**, **Red 186**, **Red 187**, **Red 188**, **Red 189**, **Red 190**, **Red 191**, **Red 192**, **Red 193**, **Red 194**, **Red 195**, **Red 196**, **Red 197**, **Red 198**, **Red 199**, **Red 200**, **Red 201**, **Red 202**, **Red 203**, **Red 204**, **Red 205**, **Red 206**, **Red 207**, **Red 208**, **Red 209**, **Red 210**, **Red 211**, **Red 212**, **Red 213**, **Red 214**, **Red 215**, **Red 216**, **Red 217**, **Red 218**, **Red 219**, **Red 220**, **Red 221**, **Red 222**, **Red 223**, **Red 224**, **Red 225**, **Red 226**, **Red 227**, **Red 228**, **Red 229**, **Red 230**, **Red 231**, **Red 232**, **Red 233**, **Red 234**, **Red 235**, **Red 236**, **Red 237**, **Red 238**, **Red 239**, **Red 240**, **Red 241**, **Red 242**, **Red 243**, **Red 244**, **Red 245**, **Red 246**, **Red 247**, **Red 248**, **Red 249**, **Red 250**, **Red 251**, **Red 252**, **Red 253**, **Red 254**, **Red 255**, **Red 256**, **Red 257**, **Red 258**, **Red 259**, **Red 260**, **Red 261**, **Red 262**, **Red 263**, **Red 264**, **Red 265**, **Red 266**, **Red 267**, **Red 268**, **Red 269**, **Red 270**, **Red 271**, **Red 272**, **Red 273**, **Red 274**, **Red 275**, **Red 276**, **Red 277**, **Red 278**, **Red 279**, **Red 280**, **Red 281**, **Red 282**, **Red 283**, **Red 284**, **Red 285**, **Red 286**, **Red 287**, **Red 288**, **Red 289**, **Red 290**, **Red 291**, **Red 292**, **Red 293**, **Red 294**, **Red 295**, **Red 296**, **Red 297**, **Red 298**, **Red 299**, **Red 300**, **Red 301**, **Red 302**, **Red 303**, **Red 304**, **Red 305**, **Red 306**, **Red 307**, **Red 308**, **Red 309**, **Red 310**, **Red 311**, **Red 312**, **Red 313**, **Red 314**, **Red 315**, **Red 316**, **Red 317**, **Red 318**, **Red 319**, **Red 320**, **Red 321**, **Red 322**, **Red 323**, **Red 324**, **Red 325**, **Red 326**, **Red 327**, **Red 328**, **Red 329**, **Red 330**, **Red 331**, **Red 332**, **Red 333**, **Red 334**, **Red 335**, **Red 336**, **Red 337**, **Red 338**, **Red 339**, **Red 340**, **Red 341**, **Red 342**, **Red 343**, **Red 344**, **Red 345**, **Red 346**, **Red 347**, **Red 348**, **Red 349**, **Red 350**, **Red 351**, **Red 352**, **Red 353**, **Red 354**, **Red 355**, **Red 356**, **Red 357**, **Red 358**, **Red 359**, **Red 360**, **Red 361**, **Red 362**, **Red 363**, **Red 364**, **Red 365**, **Red 366**, **Red 367**, **Red 368**, **Red 369**, **Red 370**, **Red 371**, **Red 372**, **Red 373**, **Red 374**, **Red 375**, **Red 376**, **Red 377**, **Red 378**, **Red 379**, **Red 380**,

Support

Liability

Every care has been taken in the preparation of this document. Please feel free to inform ProdataKey Support of any inaccuracies or omissions in this documentation. We welcome your feedback and suggestions. ProdataKey cannot be held responsible for any technical or typographical errors and reserves the right to make changes to the product and documentation without prior notice.

ProdataKey makes no warranty of any kind with regard to the material contained within this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. ProdataKey shall not be liable nor responsible for incidental or consequential damages in connection with the furnishing, performance, or use of this material. This product is only to be used for its intended purpose.

Intellectual Property Rights

Patents Pending - ProdataKey has intellectual property rights relating to technology embodied in the product described in this document.

Equipment

This equipment must be installed and used in strict accordance with the instructions given in the user documentation. This equipment contains no user-serviceable components. Wiring methods shall be in accordance with the National Electrical Code, ANSI/NFPA 70. Unauthorized equipment changes or modifications will invalidate all applicable regulatory certifications and approvals.

Use only accessories that comply with the technical specification of the product. These can be provided by ProdataKey or an approved third party. Use only spare parts provided by or recommended by ProdataKey.

After the system is installed and working properly, no further maintenance or testing is required.

Do not attempt to repair the product by yourself. Contact ProdataKey Support or your ProdataKey authorized distributor for service matters.

Trademark Acknowledgments

ProdataKey, Prodata Key, prodatakey, PDK, Prodata, are registered trademarks or trademark applications of ProdataKey in various jurisdictions. All other company names and products are trademarks or registered trademarks of their respective companies. Permission to use, copy, modify, and distribute this software and its

Support

documentation for any purpose with or without fee is hereby granted, provided that the copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation.

Regulatory Information

Electromagnetic Compatibility (EMC)

This equipment has been designed and tested to fulfill applicable standards for:

- Radio-frequency emissions when installed according to the instructions and used in its intended environment.
- Immunity to electrical and electromagnetic phenomena when installed according to the instructions and used in its intended environment.

Safety

This manual has been prepared to help you install the product. Read through the installation instructions carefully before installing the product. Keep the guide for future installation and maintenance references.

This product complies with IEC/EN/UL 60950-1, Safety of Information Technology Equipment. If your connecting cables are routed outdoors, the product shall be grounded either through a shielded network cable (shielded twisted pair) or another appropriate method.

The power supply used with this product shall fulfill the requirements for Safety Extra Low Voltage (SELV) and Limited Power Source (LPS) according to IEC/ EN/UL 60950-1.

Disposal and Recycling

When this product has reached the end of its useful life, dispose of it according to local laws and regulations. For information about your nearest designated collection point, contact your local authority responsible for waste disposal. In accordance with local legislation, penalties may be applicable for incorrect disposal of this waste.

Supported Readers

See the available product data sheets at <https://www.prodatakey.com/products>

Learn More

Support

**Visit ProdataKey accesscontrol101.com for certification training and tutorials.

Notice

- The ProdataKey **Red 1** Door Controller is intended for indoor use only.
- The ProdataKey product shall be installed by a trained professional.
- The ProdataKey product shall be used in compliance with local laws and regulations.
- The ProdataKey product shall be installed within a secured area.
- Mount in a dry and well-ventilated environment.
- To provide the best conditions and proper operation of the product, the controller must be securely mounted in accordance with the installation instructions.
- Do not install the door controller box on unstable brackets, surfaces, or walls.
- To use the **Red 1** door controller outside or in harsh environments, use ProdataKey Gate Controller. Call Sales for the proper model based on your application.
- Use only applicable tools when installing the ProdataKey product. Using excessive force while mounting the product could cause damage.
- Avoid exposing ProdataKey product to shocks or heavy pressure.
- Do not use chemicals, caustic agents, or aerosol cleaners to clean the product. Use a clean cloth dampened with pure water for cleaning the exterior of the enclosure.
- Use only accessories that comply with the technical specification of the product. These can be provided by ProdataKey or a ProdataKey authorized third-party vendor.
- Use only spare parts provided by or recommended by ProdataKey Support or a product reseller.
- Do not attempt to repair the product by yourself. Contact ProdataKey Support or your ProdataKey authorized distributor for service matters.
- Use a can lock to ensure secure enclosures and prevent tampering.
- Protect the power cord, Ethernet cable, and transformer wires from being walked on or pinched, particularly where the wiring exits the box.
- For UL- certified installations, all cable runs to the door controllers must be less than 98.5 feet (30 meters).

Manufacturer's Limited Warranty

One to three-year warranty against defects in materials and workmanship. Full details at prodatakey.com.**

Support / Sales

Support

Support:

- **Phone:** 801.317.8802 option #2
- **Email:** support@prodatakey.com
- **Direct Dealer Support Line:** 801.206.4086

Sales:

- **Phone:** 801.317.8802 option #1
- **Email:** sales@prodatakey.com

Copyright

© 2021 ProdataKey, LLC. All rights reserved. ProdataKey, the ProdataKey logo, the Red logo and other ProdataKey marks are owned by ProdataKey, LLC and may be registered. All other trademarks are the property of their respective owners. ProdataKey assumes no responsibility for any errors that may appear in this manual. Information contained herein is subject to change without notice.

Red 1 Door Controller Instruction Manual

ProdataKey Door Controllers

© 2022 ProdataKey, LLC.

Ver. 1.0.3



Was this article helpful?

Yes

No

0 out of 1 found this helpful

Return to top ^

Recently viewed articles

[Red 4 User Manual](#)

[Red Gate Controller User Manual](#)

Support

[Red Reader | Mullion Reader User Manual](#)

[Standard Mullion & Single-Gang Readers](#)

Related articles

[Red 2 User Manual](#)

[Red 1 Data Sheet](#)

[Cloud Node Panel with Single io Controller](#)

[Push Button Reader User Manual](#)

[Wireless Programming Kit](#)

Comments

0 comments

Article is closed for comments.

ProdataKey, Inc.

 [Powered by Zendesk](#)

Support