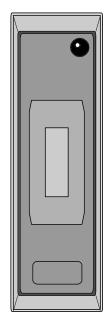
READYKEY® K2003/K2003W Mullion Reader Operation and Installation Instructions

Features

- Easy Installation
- Reads K2010 Keys and K2011A Cards
- Status LED indicates Access Authorized
- Rated for indoor and outdoor use
- Offered in Black or White Colors
- Low idle current consumption (35-60mA)
- 5 Year Warranty



Description

The K2003 proximity reader is an accessory for the Radionics Readykey K2100/K1100 Door Controllers. The K2003 uses pre-encoded proximity keys or cards. Each key/card is encoded with a unique code.

The K2003 is weather resistant and suitable for indoor or outdoor use. Keys and Cards are read at a distance of up to 2 inches.

This reader is also available in white (K2003W)

How the K2003 Operates

The K2003 has an LED to indicate reader status. When the reader's LED is Red the reader is ready to read a key or card. When a valid key/card is read the LED momentarily goes Green. If the key/card is valid, the K2100/K1100 will activate the lock output that is connected to the electric lock, and the reader LED will turn Green while the lock output is active or in an automatic unlocked condition. The K2003 also has a built in sounder that can be used to indicate a Door Held Open alarm or other options by using one of the K2100/K1100 Door Controller on board relays.

Items Included with the K2003

- 1 K2003 Proximity Reader
- 1 Reader Front Cover
- 10 Crimp Connectors

Install the K2003

Choose the Best Mounting Location for the User

The normal height for the reader is approximately 48 inches (four feet) from the floor, on the unhinged side. Check local regulations regarding proper mounting locations for disabled or handicapped persons.

Mount the reader on any firm flat surface. Avoid mounting the reader on rough textured surfaces.

There must be a distance of at least 36 inches (three feet) between two readers. Therefore, if using readers to control entry and exit from an area, they must be mounted on opposite sides of the door.

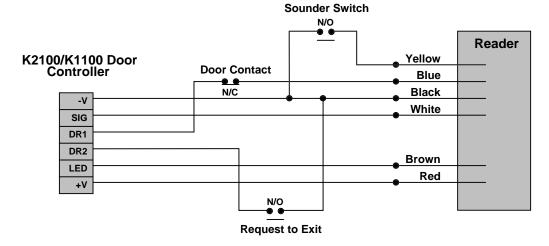
WARNING: Each reader has an exposed wire link on the reverse. If the reader is mounted on a **non-metallic** surface (e.g. wood, plaster, brick etc.) then the link **must be cut**. If the reader is mounted on a **metallic** surface then **do not cut** the link.

No special precautions are needed if the reader is mounted outside, as it is fully encapsulated. The connections made to the flying lead, however, may need protection.

Route the Cable

Install the K2003 up to 1500 feet from the K2100/K1100 using 22 AWG wire or up to 3000 feet from the K2100/K1100 using 18 AWG wire. Run a four wire cable from the K2100/K1100 to the K2003 mounting location. If using a door contact and a request to exit device use a six wire cable. If the sounder is also to be used, use an eight wire cable.

Connecting the K2003 to the K2100/K1100 Door Controller



Splicing the Cable to the Wiring Harness

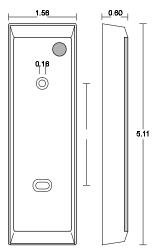
Use the crimp connectors provided, or other suitable means such as soldering, to splice the wiring harness, provided on the K2003 to the end of the cable. When using 22 AWG cable, you should twist the wires together and double them over before inserting them in the crimp.

The table shows the connections:

Wire Color	Function	K2100/K1100 Terminal
Orange	+5 VDC	Not Used
Black	Common	V- ,GND
White	SIG	SIG
Green	Data 0 Output	Not Used
Brown	VCA	VCA/LED
Red	+12/18v VDC	V+ , 18V+
Yellow	Sounder	Relays 1-4
Blue	Tamper	DR1

Metallic Surfaces

A wire link on the rear of each reader is used to select the type of surface on which the reader is mounted. If mounting the reader on a non-metallic surface, then cut the link. If mounting the reader on a metallic surface then do not cut the link.



Mounting the Reader

This reader comes in two parts, the reader itself with flying lead, and a front cover.

- 1. Attach the reader to a flat surface using the #6 screws provided or a mounting screw suitable for the material to which the reader is being mounted. The two holes are 60mm apart. Use the round hole first, and then the oval hole to ensure the reader is straight.
- 2. Push the front cover onto the reader.

Reader Operation

Normal Operation

The reader LED will normally be red when the door is closed. When a key/card is presented within range of the reader the LED will flash green momentarily to indicate the code in the key/card has been read. If the key/card is valid for that door at that time the LED will go green and the lock will operate. The LED will stay green while the door is in an unlocked state.

Sounder Operation

The internal sounder will operate if the **yellow lead** is grounded. The sounder will continue until the connection to ground is broken. A relay may be used to provide this operation under various conditions, e.g. Access Granted.

Specification

Dimensions: 1.56in x 5.11in x 0.6in

Voltage: 12-18v DC, (supplied by K2100/K1100 Door Controller)

Current: Idle: 35mA Reading: 60mA

Temperature: Operating -10C to +55C (14°F to 130°F)

Storage -30C to +80C (-20°F to 175°F)

Humidity: Operating 0-90% RH at $30C \pm 2C (85^{\circ}F \pm 5^{\circ}F)$ for 24 hours

Reading Range: 0-2 inches
Lead Length: 36 inches

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.