Installation Instructions

Proximity Reader

Introduction

The RX Series readers are attractive and durable proximity readers. A piezo buzzer and tri-colour LED indicate reader status to make the device very easy to use. The reader circuitry is encased in a durable, waterproof resin, making it suitable for both internal and external use. "00" variants use 125KHz Controlsoft Proximity cards

"00" variants use 125KHz Controlsoft Proximity cards and tags

"80" variants support 13.56MHz MIFARE & DESfire "80+" variant support all above cards and tags. "K" variants include an integral keypad

Step 1: Mount the Reader

Part Code: RX-100; RX-180; RX-180+ RX-1K00; RX-1K80; RX-1K80+ RX-300; RX-380; RX-380+ RX-3K00; RX-3K80; RX-3K80+ RX-400; RX-480; RX-480+



Use the reader base to mark the position of the fixing screws, plus one hole for the connection cable. Drill the holes and plug the mounting holes, connect the cable as shown below, fix the base to the wall and fit the reader to the base. Alternatively, the "RX-1" Series are designed to mount to a standard UK single gang backbox.

Step 2: Connect the Reader to the Access Control Unit

The reader has 8 terminal blocks for connection to the Access Control Unit (ACU): Connect the reader as described in the Installation Instructions for the ACU, using screened, non-twisted cable such as Belden 9538. The distance between the reader and the ACU must not exceed 150 metres.

Terminal	Signal Description
1	+12Vdc (100mA)
2	Data 1
3	Data 0
4	Green LED Control
5	Red LED Control
6	Buzzer Control
7	Not Used
8	Ground (0V)



2 Connecting to the ACU

Information on wiring to a Controlsoft i-Net[™] controller, expansion board or AC-3300 Solo 2 controller is provided below.

If the distance between the ACU and reader is more than 25 metres, power must be supplied to the reader by a power supply mounted close to the reader.



iNet 1DR, 2DR or Plus

Step 3: Connect Power

The reader requires 12Vdc power at 100 mA for normal operation.

Whenever power is first supplied to the reader, the LED will illuminate blue, and the beeper will sound to indicate the reader is fully functional.

Step 4: Program the Reader

RX Keypad Readers work "out of the box" as a "Prox Only" reader or as "Prox and PIN" reader, thus no programming is necessary. If changes are required, follow the instructions listed below:

Change the Security PIN

For security reasons, we recommend that the Security PIN is changed when installed. To achieve this, enter the following commands through the keypad:

* **0 0 e e e e #** (to enter Programming Mode)

* 98 e e e e n n n n # (to change the Security PIN)

* 9 9 # (to exit Programming Mode)

where eeee is the existing Security PIN and nnnn is the new Security PIN

EXAMPLE: to change the Security PIN from 1234 to 6789, enter

*001234# *9812346789# *99#

Change from "Prox AND PIN" mode to "Prox OR PIN" mode

To configure the RX-1K00 to work as a "Prox OR PIN" (i.e. some users can present a card, others can enter a code), use the following programming commands:

- * **0 0 p p p #** (where pppp is the Security PIN)
- * 0 1 7 # (sets PIN mode to 26-bit Wiegand to emulate a card)
- * **0 6 0 0 0 0 0 #** (sets the Site Code to 0)
- * 9 9 # (exits programming mode)

Change from "Prox OR PIN" mode to "Prox AND PIN" mode

To configure the RX-1K00 to work as a "Prox AND PIN" (i.e. 2 factor authentication), use the following programming commands:

- * **0 0 p p p #** (where pppp is the Security PIN)
- * 0 1 1 # (sets PIN mode to 4-bit Wiegand burst)
- * 9 9 # (exits programming mode)

To configure Employees or Visitors in Controlsoft Lite or Controlsoft Pro: For users requiring Prox only: Assign an ID card number in the usual way For users requiring Prox AND PIN: Assign ID card number and PIN in the usual way For users requiring PIN only: Set the ID card number as the code that the user wants to use (this code must less than 65535)

Step 5: Test

Normal operation of the reader is indicated as follows:

- 1 LED = BLUE (normal wait state).
- 2 An 'allowed card' swiped at the reader (or combination of card and PIN) causes a beep and the LED to change to GREEN (allow state).
- 3 A 'denied card' swiped at the reader (or combination of card and PIN) causes a beep and the LED to change to RED (deny state).

Caution:

The "crossed out wheeled bin" logo on Controlsoft products indicates that this product should not be disposed of via the normal household waste stream.

To prevent possible harm to the environment or human health, please separate this product from other waste streams. For further information, contact your local government office or the retailer where you purchased product. This information only applies to customers in European Union.

For other countries, please contact your local government to investigate

the possibility of recycling your product.

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