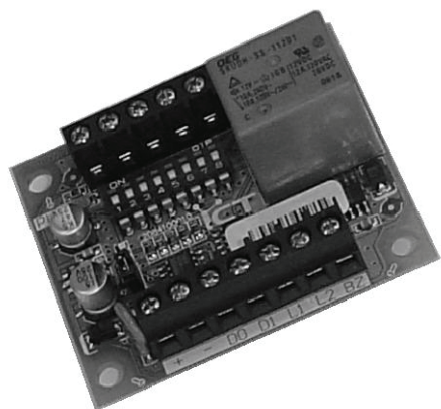




PRX-SAM

Standalone Proximity Reader Interface



Installation Manual

1. Introduction

Thank you for choosing the Nano Prox series of Standalone Proximity Readers from Integrated Control Technology. The standalone interface allows management of the Nano Prox series of Proximity readers using the Nano Prox software. Connection is made with RS232 and RS485 interfaces selectable using the on board 8 way dip switch.

2. Configuration

By default the standalone interface is shipped with no options enabled and needs to be set correctly for the desired operation.

**!** Configuration of the DIP switch settings **MUST BE** done with the power off. Setting conflicting switch settings may damage the PRX-SAM.

**Input Mode Operation**

Input Only Mode is selected by turning ON Switch 1 and 5 and turning off all other switches. This allows a standard input configuration to be used with a Buzzer Control Input and an Alarm Output (Open Collector).

**RS232 Serial Communication Mode**

RS232 Serial Communication Mode is selected by turning ON Switch 2,3,6 and 7. This will allow the RS232 communications to be wired to the P1 (Receive Data) and I3 (Transmit Data).

**?** The alarm output P1 is used for the transmit data in both the serial modes. The beeper will still be activated to signal a forced/open door.

**RS485 Serial Communication Mode**

RS485 Serial Communication Mode is selected by turning ON Switch 2,4,6 and 8. This will allow the RS485 communications to be wired to the I3 (NA) and P1 (NB).

**?** If the PRX-SAM is located at the end of the RS485 communication cable run, ensure that the EOL jumper is enabled.

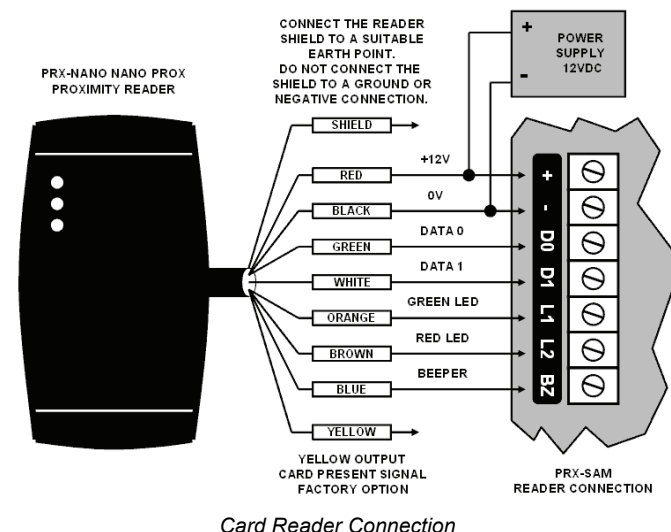
3. DIP Switch Configuration

The following table shows the individual functions for the configuration DIP Switch.

Switch	Function
1	Input Only Mode
2	Serial Communication Mode
3	RS232 Mode
4	RS485 Mode
5	Input Only Mode
6	Serial Communication Mode
7	RS232 Mode
8	RS485 Mode

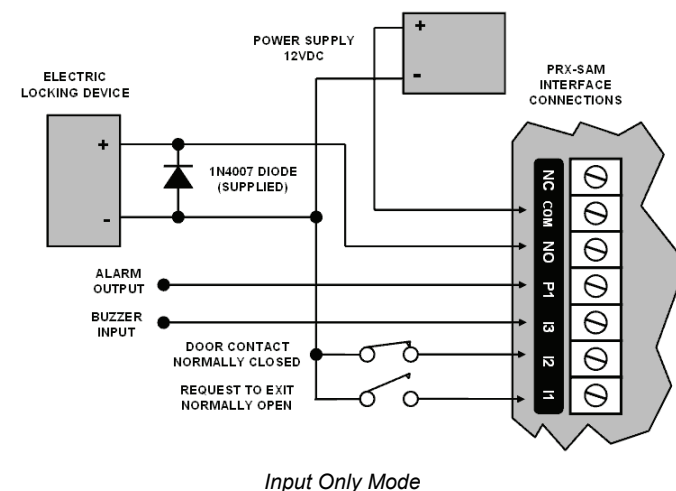
4. Card Reader Connection

The proximity reader and power supply is wired in to the terminal block on the bottom edge as shown below.



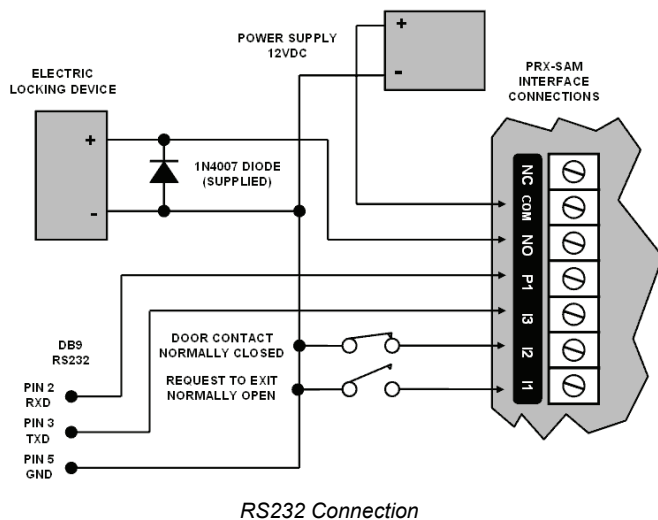
5. Input Mode Wiring Connection

Input wiring allows the connection of standard inputs to the PRX-SAM for the door contact and REX (request to exit) button.



## 6. RS232 Wiring Connection

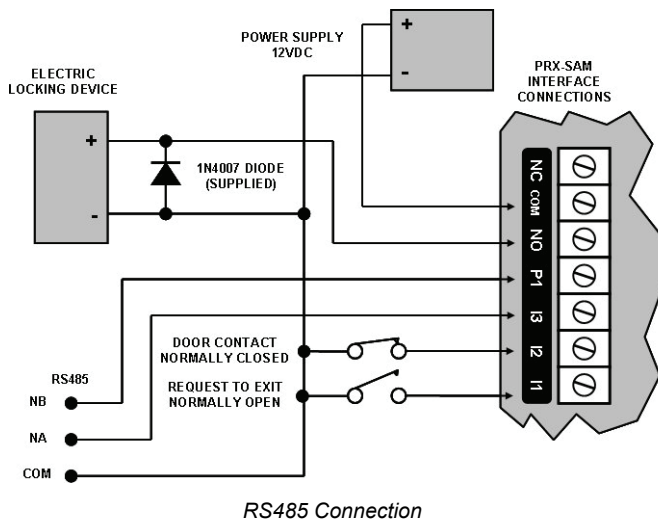
RS232 wiring allows the connection of the Nano Prox to the RS232 Serial port on a computer, and the programming to be completed using the Nano Prox software.



**Important:** The EOL Jumper must be removed when in RS232 mode or data transmission may fail.

## 7. RS485 Wiring Connection

RS485 wiring allows the connection of the Nano Prox to the RS232 Serial port over a distance of 900M using an ACC-485 RS232/RS485 Converter. Programming of the Nano Prox can then be completed using the Nano Prox Management software.



**?** Using the RS485 serial communications connection allows up to eight Nano Prox readers to operate over the same serial connection.

## 8. Specifications

### Power Supply

Operating Voltage	12VDC (11.5 - 14.0VDC)
Operating Current	55mA (Peak, Relay On)

### Interface

RS232	EIA / RS232 Standard
Distance	15 Meters (55 feet)
RS485	EIA / RS485 Standard
Distance	900 Meters (2500 feet)

### Relay Output

FORM C	5 AMP Resistive
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### Cable Type

Multi Conductor	22Awg Alpha 5196, 5198
	18Awg Alpha 5386, 5388
	18Awg Beldon 9553

### Temperature

Operating	-35° - +65° Celsius
	-31° - 149° Fahrenheit

Specifications are subject to change without notice, please visit [www.incontrol.co.nz](http://www.incontrol.co.nz) for updated information. For information on programming the Nano Prox Series of Proximity Readers in standalone mode refer to the appropriate reader installation manual or download a copy from the ICT website.

# ICT®

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