Technical Support

☎ **01273 811011**

✉ support@paxton.co.uk

Technical help is available: Monday - Friday from 07:00 - 19:00 (GMT)
Saturday from 09:00 - 13:00 (GMT)

Documentation on all Paxton products can be found on our website - http://www.paxton.co.uk/

Suitability

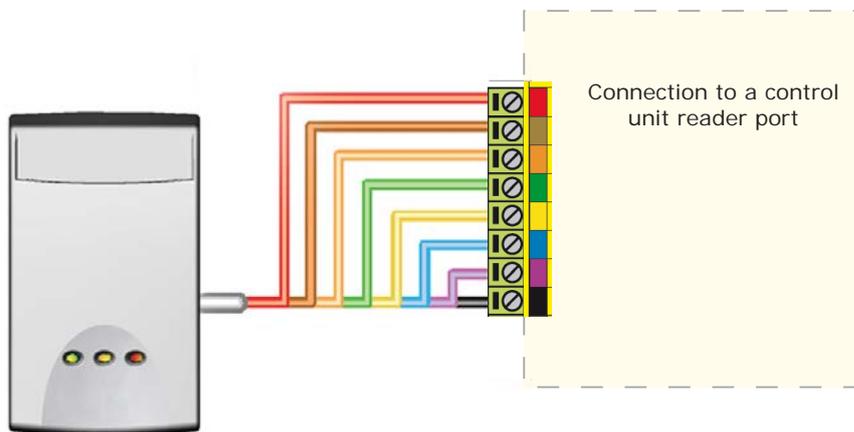|			
Controls external equipment	✓	Mounted on metal surface	✗
Wet environments	✓	Readers mounted together	**300 mm** between readers

Fitting

How is it used ?

This proximity reader has a special cover that is designed to retain a user card. The presence of a card in the reader can then be used to turn on/off other equipment when a user is present.

A reader and controller can be used to provide a voltage free relay toggled output that can either directly switch low voltage (less than 24V DC) or, in conjunction with a mains contact relay, switch power to equipment or lighting.

Wiring

Connection to a control unit reader port

Cable extensions

Readers can be extended using Belden CR9540 10-core overall screened cable to a maximum of 100 metres.
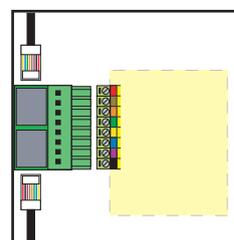
Connection modules

Reader junction box (325-020)
This module can be used to provide a connection point for the reader RJ45 plug. The terminals on the module are then wired colour for colour to the controller.

Alternatively, the reader can be wired directly into the screw terminals of the control unit by first cutting off the RJ45 plug and stripping back the wires in the cable.

Reader port module (325-030)
This module may be purchased separately to speed up the installation and replacement of readers.

The reader port module is designed to convert the standard reader ports on Switch2 and Net2 controllers to accept one or two RJ45 connections. Pull off the screw terminal block from the reader port and simply replace it with this module.

Further information on how to purchase Installer Tools is available at: http://paxton.info/841

Operation

When a valid user card is introduced to the reader, its card number is sent to the controller.   The reader constantly monitors for the presence of that card and once it is no longer in range of the reader (removed from the holder) the card number is sent a second time. Paxton control units have a toggle function that will change the state of the relay each time it receives a card number.

The system only monitors one card at a time and so a short 'off' period will occur if the user card in the holder is exchanged for another.

If the Access level of a card becomes invalid (e.g. the time period or date expires) while it is in the reader, removing the card will NOT turn off the equipment. You will need to introduce and remove a valid card to correct this condition.

Net2 has a toggle function assigned to Relay 2 and so either Reader port 1 or 2 can be used for this function. You will need to select the Relay 2 toggle mode on the relevant reader screen.

Paxton controller relays must NOT be connected directly to the mains supply. For further information see: AN1088 - Using the energy saving reader to switch mains power.

Specifications

Environment	Min	Max	
Operating temperatures - all items	-35 °C	+66 °C	
Waterproof			Yes - Rated IPX7
Cable length			5 metres
Electrical	Min	Max	
Voltage	8V DC	14V DC	
Current		170 mA	
Carrier frequency			125 kHz
			13.56 MHz
Clock and data bit period	570 µs	700 µs	
Dimensions	Width	Height	Depth
	61 mm	105 mm	17 mm

Compatible with the following tokens

Mifare 1K	EM4100
Mifare 4K	Hitag1 ISO
Mifare Ultralight / C	Hitag2 ISO
Mifare Desfire	Paxton proximity cards