Ins-40015-US Mullion PROXIMITY reader - UL

▼Paxton

Technical Support

☏ 1.800.672.PAXT   @✉ support@paxton-access.com

Technical help is available: Monday - Friday from 02:00 AM - 8:00 PM (EST)
Saturday from 04:00 AM - 08:00 AM (EST)

Documentation on all Paxton products can be found on our web site - http://www.paxton-access.com/

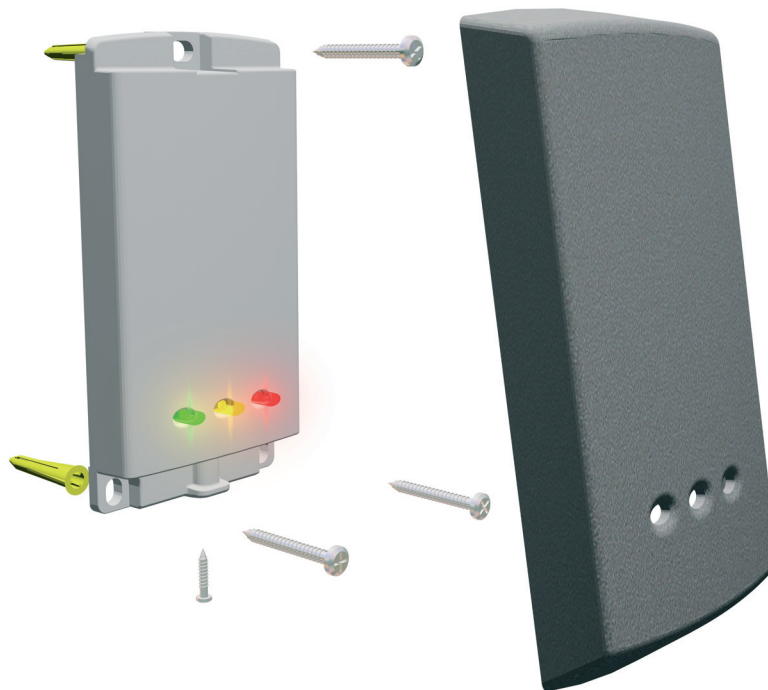---

Suitability

Security sensitive doors ✓   Mounted on metal surface ✗

Wet environments ✓   Readers mounted together **12 inches** between readers
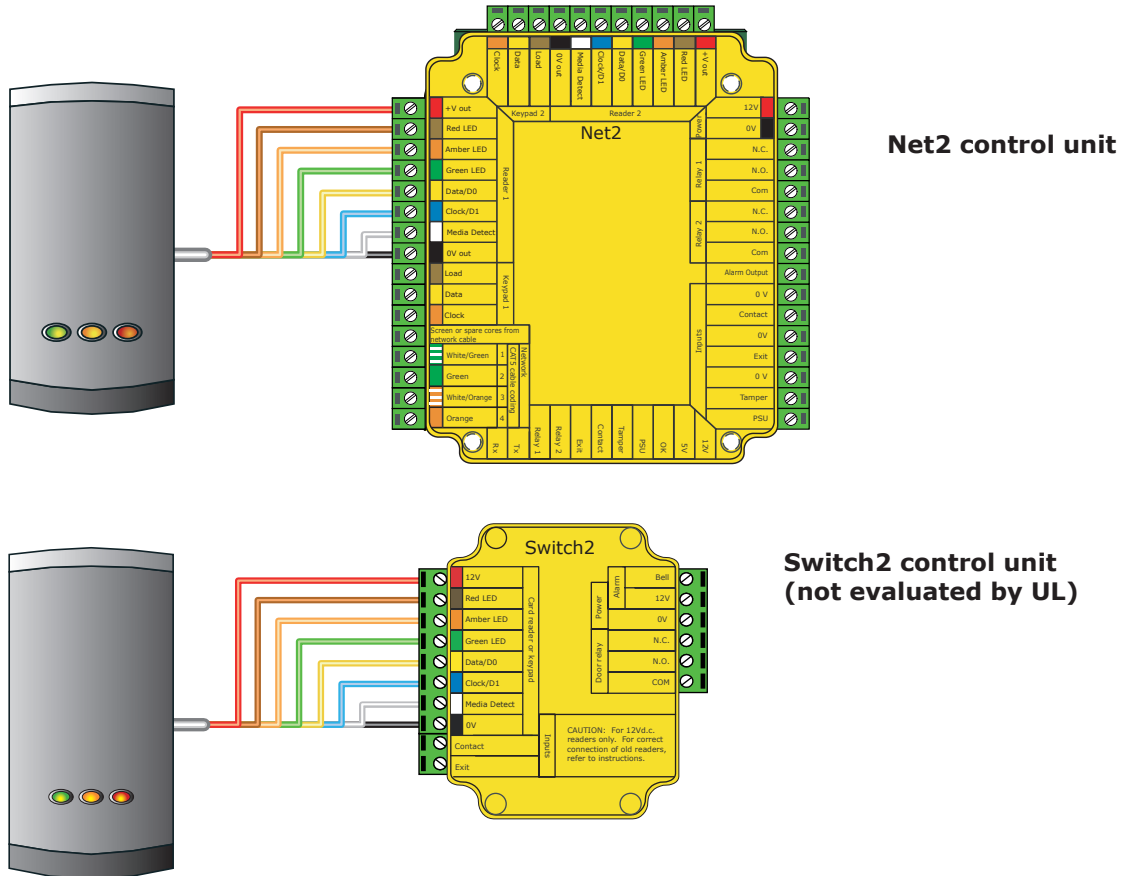

Fitting

This reader is designed to read EM4100 tokens. It will provide Clock and Data
output for Paxton (Net2 / Switch2).

Options

Part number	Description
353-110-US	Mullion PROXIMITY reader

Wiring

Net2 control unit

**Switch2 control unit
(not evaluated by UL)**

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction.

All interconnecting devices must be UL Listed.

Cable extensions

Cable Specification		
Use	**Max length**	**Type**
Reader	100 yds	10 core, shielded - Beldon 9540, Alpha 1298C (22AWG) or equivalent

NOTE: Where selected, any equivalent cabling / wire must be ' UL Listed '

Fitting Kit		
Option	**Part number**	**Description**
Mullion	Fitting Kit fk1-085	5 off - Cable clips
		3 off - No6 x $^3/_4$in pozi round woodscrew - zinc
		3 off - Wall plugs 22mm
		1 off - 8mm x 3mm small pozi pan self tapping screw - zinc

Unit installation / test

When choosing a location for the reader, ensure that it is at least 12 inches from other readers. This will include readers mounted on the other side of the same wall as the radio signal will cause interference and reduce the read range. The reader should not be used on metal surfaces as the reflected signal will also reduce the read range.

Standard Unit - Drill a hole in the surface for the rear data cable. Secure the unit to the surface with three screws as per fitting diagram on page 1. Suitable screws and fixings are provided for fitting the unit to a wall. Ensure the data cable has free access at the rear.

 A choice of black and white covers are also provided. Hook the required cover over the top of the reader, press home at the bottom and secure with the single fixing screw.

The reader will beep and all the LED's should display after powering on the control unit. Presenting a user card to the reader will cause the LED's to briefly change to a single Green or Red LED.

Check the following FAQs section for assistance if any problems are encountered.

Maintenance

Following the completed installation of this equipment, no further maintenance or testing is required.

It is advisable to ensure that any third party backup power supplies or recovery procedures are checked regularly to ensure that the operation of the Paxton Access system is not compromised.

FCC Compliance

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. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Technical Help

Here is the list of topics about this product that receive the most technical support inquiries.
We list them here to help you speed up the installation and trouble shooting process.

1 - Readers/Keypads not working.
- Software settings - Confirm that the settings of the reader or keypad are correct.
- Connections - Check the wiring and integrity of the connectors. If possible, test this reader on the other port.
- Extended cable - Belden 9540 should be used up to a maximum of 100yds. Twisted pair alarm cable should
   not be used. To confirm that an extended reader cable is not at fault, wire the reader directly to the port.
- Supply voltage - Confirm that the voltage is within specification. (see table)
- User token - Confirm that the user token used for testing is OK by presenting it to a known working reader.
- Interference - Confirm whether the reader works when tested 'in hand' and not mounted on the wall.
   PROXIMITY readers should not be mounted back to back or close to other RF devices.

2 - Readers / Keypads - Extending cable.
Only Belden CR9538 / 9540 can be used for cable extensions. CR9538 8 core for up to 25yds, CR9540 10 core
for 25-100yds (maximum). With CR9540, the two additional cores should be used to double up the power.

3 - Net2 - Using a door reader as a desktop reader.
When there is no desktop reader on site it is possible to configure a door reader to operate as a desktop reader:
1 - Select the doors menu in the left hand Net2 pane.
2 - Click on the door you wish to change the reader to act as a desktop reader.
3 - Under the relevant reader tab, change the reader operating mode to 'Desktop Reader'.
4 - The PC displays 'Would you like to accept desktop reader events from this reader at the PC?' ; click 'Yes'
Now when you present a blank or existing token to that reader it will act in the same way as a USB desktop
reader, enabling you to add new tokens or edit existing ones.
NOTE: Remember to return the operating mode to the original setting once the cards have been read
or users will not be able to gain access through the reader.
KP Reader - Ensure that Keypad type is set to 'None', otherwise the Desktop reader option will not be available.

4 - Net2. Two readers into one reader port.
Two readers can be wired in parallel. - Color for Color. This can be useful in situations such as a barrier where
dual height readers are required; one for cars, one for trucks.

5 - Net2. What to do if a user has no access - Check the reader LED's when a card is shown.
- No LED's - the reader has no power.
- No change in display - try the card on a known working reader. If there is still no response, replace the card.
- Green LED flashing when a card is presented; check relay 1 LED to check for activity and also the lock wiring.
- Red LED is flashing when a card is presented; check the validity of the user at the PC.
   Check user's access level and ensure they should have access by clicking on Current Validity.
   Check the 'Valid Until' date and confirm this has not expired.
- Reinstate the ACU from the doors screen. Select the ACU's you wish to reinstate and then click OK.

Specifications			
Environment	Min	Max	
Operating temperatures - all items	-35 °C (-31 °F)	+66 °C (+ 151 °F)	
Waterproof	IPX7		Outdoor Use
Cable length			10 feet
Electrical	Min	Max	
Voltage			12V DC
Current		130 mA	
Carrier frequency			125 kHz
Clock and data bit period			600 µs
Dimensions	Width	Height	Depth
	1 $3/4$ inch	4 inch	$3/4$ inch
Read Range	Token	Keyfob	Hands Free Token
	3 inch	2 inch	4 feet