

Technical Support

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Technical help is available: Monday - Friday from 02:00 AM - 8:00 PM (EST)
Documentation on all Paxton products can be found on our web site - <http://www.paxton-access.com/>

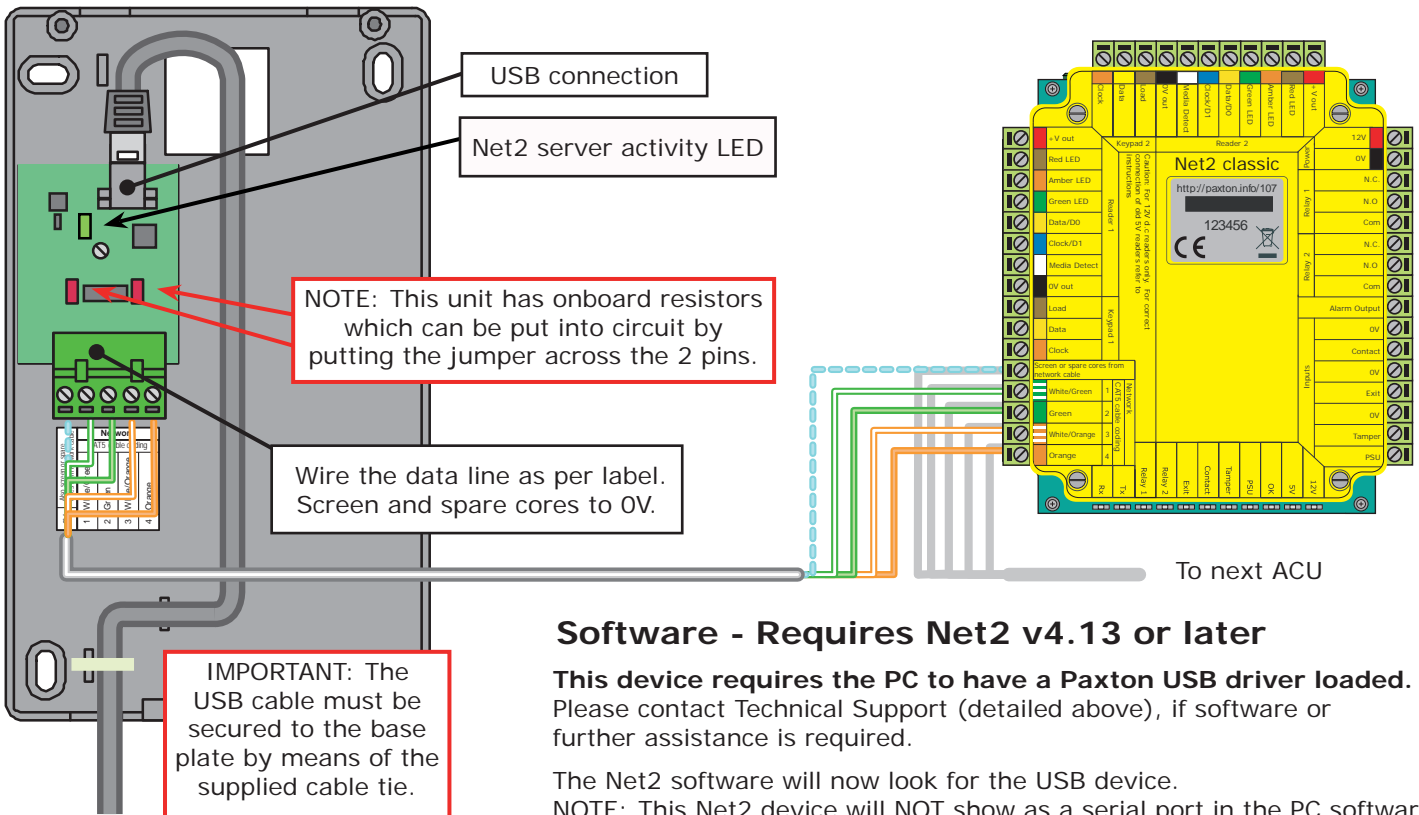
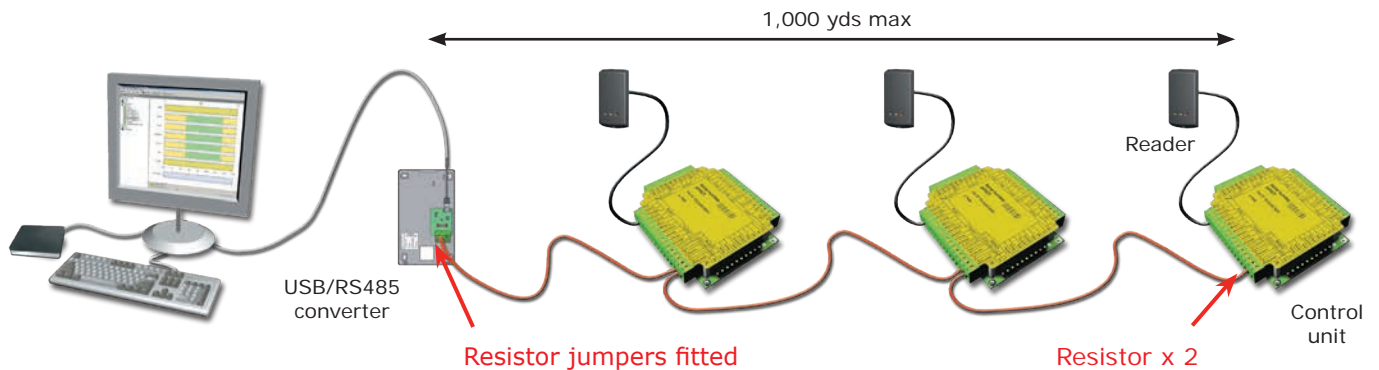
What data cable should be used?

CAT5, Belden 8723 or General Cable C1352AD23

This must be wired as a single daisy chain. The converter may be located at any point along the line.

End of Line Termination

120 ohm resistors must be linked across each data pair at the beginning AND end of the data line. This can be done on many units with a switch or jumpers. If not, free resistors are provided with the converter. If the data converter is located at a point along the data line, termination will then be required in the two ACU's at each end of the line.



Installation

This unit is for Indoor use only

Options	
Part number	Description
455-482-US	Net2 USB/485 converter kit in plastic housing

This unit is designed to connect to a USB port and supply the data at the required communications protocol necessary for Paxton Net2 equipment.

The converter is connected to the PC port with the supplied data cable.

The unit is supplied in a plastic housing which should be fixed to the surface with suitable fasteners; four screws and wall plugs are provided for this in the fitting kit. Also provided are cable ties to secure the cabling and 2 smaller screws for the lid.

This unit is for supplemental use only, and is to be employed as a programming/downloading/monitoring tool only.

The ACUs will continue to operate in a 'standalone' mode if the PC is shut down or the data line is disconnected. Any Events that occur during this period are stored in the ACU and the PC is updated when it comes back on line. NOTE: The PC must be running for any 'active' functions to operate. (e.g. Fire Door release)

All interconnecting devices must be UL Listed.

Fitting Kit	
Part number	Description
Fitting Kit fk1-039	2 off - Cable tie
	4 off - 120 ohm resistor
Fitting Kit fk1-056	3 off - Cable tie
	4 off - No8 x 1in pozi round woodscrew - zinc
	4 off - Wall plugs
	2 off - No6 x 1/2in pan self tapping screw - zinc

RS485 dataline

The RS485 data line has a maximum continuous length of 1,000 yds and requires termination to be fitted at each end. See page 1 for details.

You can also refer to: [Ins-40000-US - Net2 classic control unit < http://paxton.info/746 >](http://paxton.info/746)
: [AN1012 - Installing a Net2 control unit < http://paxton.info/48 >](http://paxton.info/48)
: [AN1040 - Installing the Net2 data line < http://paxton.info/877 >](http://paxton.info/877)

**90% of installation faults are caused by wiring errors on the RS485 data line.
Special attention to this area can save time and effort.**

Power Supply

The power for the unit is supplied via the USB cable. No additional supply is required.

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

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 system is not compromised.

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. ACU not responding or fails to be detected (Data line resistance check). - First power down the converter (RS232 or TCP/IP) and disconnect any ACUs that do not have a flashing OK LED. Using a Multimeter, measure the resistance across the White/Green and Green pair at one end of the network. A resistance of between 60 and 80 ohms is required. Repeat the test for the White/Orange and Orange pair. This is vital for a stable and trouble free installation.

2. Data line cable layout. - The data line must be wired in a daisy chain; the converter (RS232 or TCP/IP) can be positioned at one end or at any location along the data line. End of Line (120ohm) resistors must be fitted across both pairs at each end of the line. Repeaters must be used over 1000 yards and can be used to create a branch from the daisy chain. CAT5, Belden 8723 (4 Core Twisted pair) or General Cable C1352AD2 must be used for the data line. The cable screen must be connected throughout for reliable communication. CAT5 must have spare cores terminated in lieu of screen cable.

Cable Specification

Use	Max length	Type
RS485 Data Line	1000 yds	2 x twisted pairs - Belden 8723, Cat5 or General Cable C1352AD23

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

Specifications

Environment	Min	Max	
Operating temperatures - all items	-20 °C (-4 °F)	+55 °C (+ 131 °F)	
Waterproof			No
Electrical	Min	Max	
Voltage			5V DC
Current		50 mA	
RS485 network speed		115.2 kbit/s	
Dimensions	Width	Height	Depth
	7 inch	4 1/4 inch	1 5/8 inch

FCC Compliance

Class B digital devices.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Class A digital devices.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.