

Technical Support

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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/>

The 1,000 yard Rule

The Net2 data line uses RS485 data signalling. This specifies that the data line is connected to the units as a series of point-to-point nodes, NOT as a star, ring or multiple line network. Each cable end must have termination resistors connected across both data pairs and the total length of any single line must not exceed 1000 yards.

Without termination resistors, reflections of these fast signals will cause data propagation (multiple signals) resulting in some data corruption. Star and ring layouts do not allow correct termination and so are not allowed because of these signal reflections.

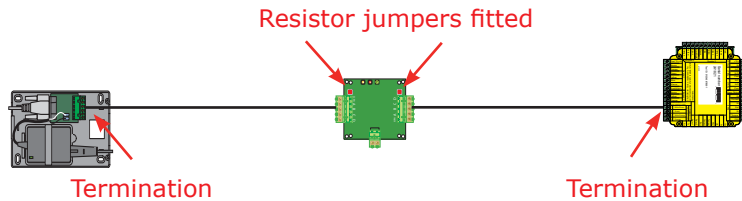
See also AN1087 - [How to create multiple data lines and side spurs with a repeater.](http://paxton.info/876) < <http://paxton.info/876> >

Termination

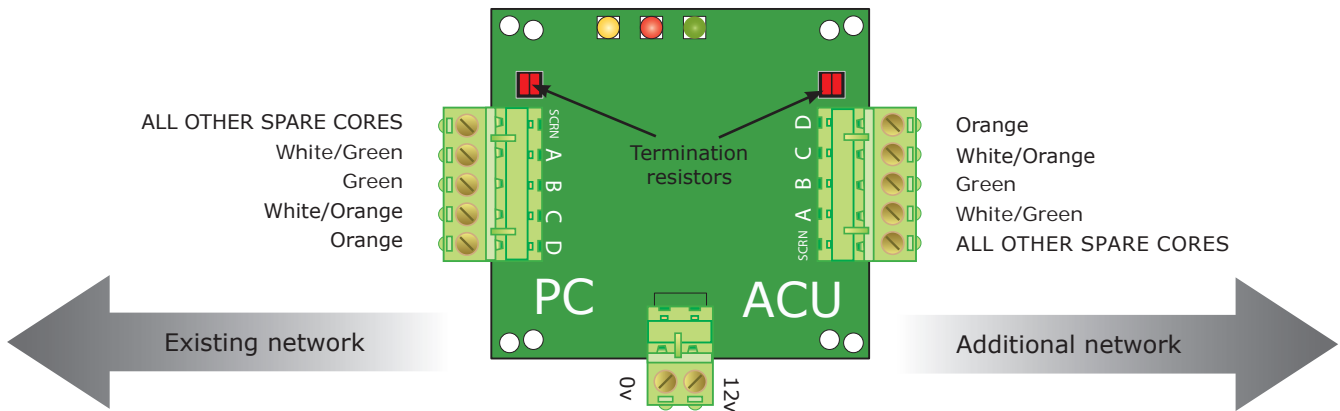
No individual data cable can be longer than 1000 yards as this is limited by the power of the data converter. By using a repeater we can originate another 1000 metre data line from any point. For example, if we require a data line of 1500 yards, the repeater can be placed within 1000 yards of either end of the line.

The two sections become individual data lines and therefore both must be terminated at each end.

This is done on many units with a switch or jumpers. If not, free resistors are provided with the data converter.



NOTE: This unit has onboard resistors which can be put into circuit by putting the jumper across the 2 pins. Up to 5 repeaters can be used on a data network. This gives a maximum distance of 6000 yards for a data line with a repeater placed every 1000 yards down the line.



NOTE: The repeater 'direction' must be wired as above. Although the repeater is a bi-directional unit, the LED indications will be incorrect if this is not done.

Indicators: Red = 12V (always on); Green = PC data (flashes if data is received from PC direction); Yellow = ACU data (flashes if data is received from ACU direction - ACUs are responding to the PC data)

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.