



Wiring RS485 twisted pair

This is a brief guide describing how to correctly wire two wire RS485 twisted pair in Belden 9502 (or similar) and CAT5 UTP cable.

This can be applied to all Access Control, Video and Intrusion systems where 2 Wire RS485 communication is used.

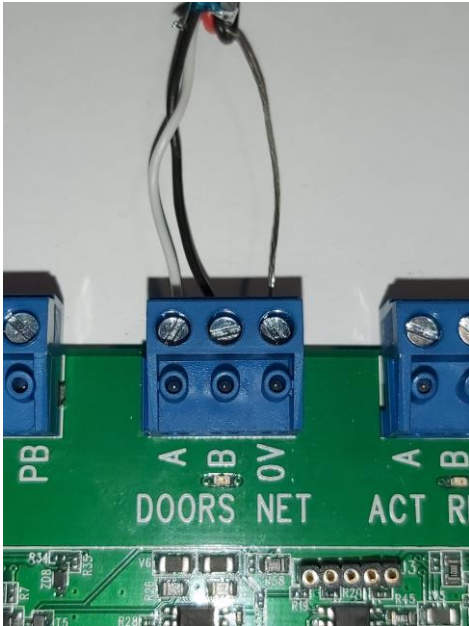
The images below show **correct** and **incorrect** ways to use the cable for RS485 connection. Twisted pair is used to cancel noise on the RS485 communications bus, and incorrect wiring may lead to poor communications, or in worst case scenario, no communication at all.

Please also note that the images shown do not include termination resistors fitted.

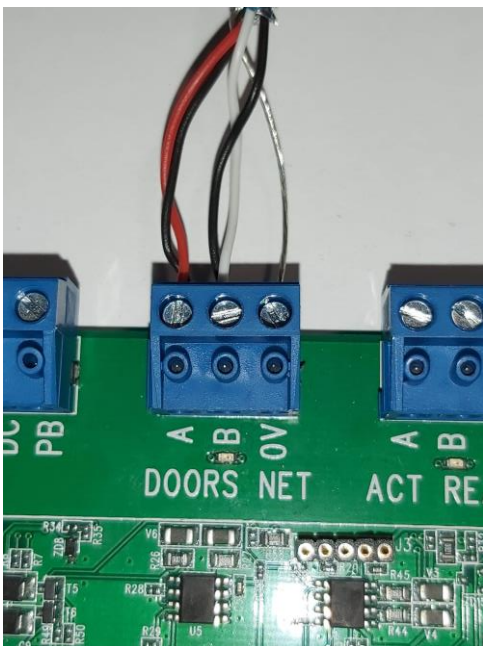
Individual product manuals will advise if termination is required for end of line.

1. Belden 9502

Correct wiring using a twisted pair for the comms

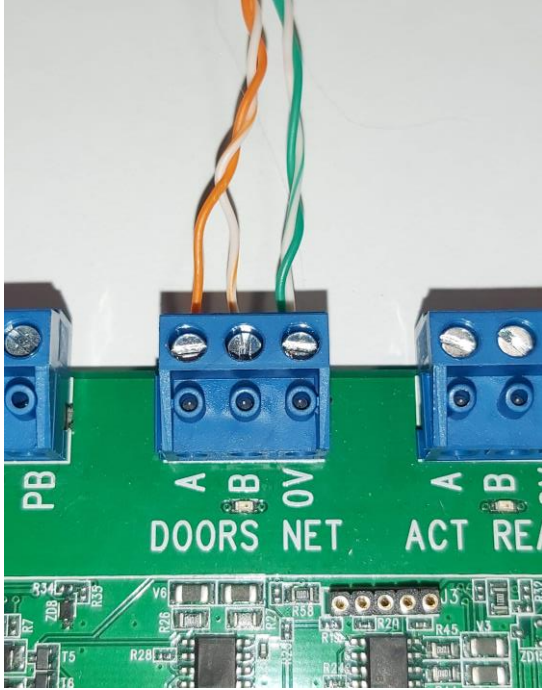


Incorrect wiring using a twisted pair for A and a twisted pair for B – this should not be used

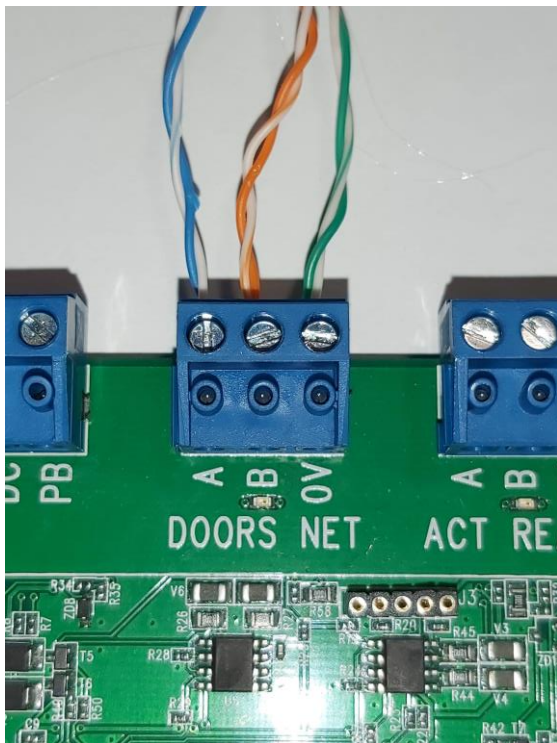


2. CAT5 UTP

Correct wiring using a twisted pair for comms



Incorrect wiring using a twisted pair for A and a twisted pair for B – this should not be used



SUPPORT INFORMATION



If you have any questions, please contact our Technical Competence Centre.
Contact details can be found on our website.

