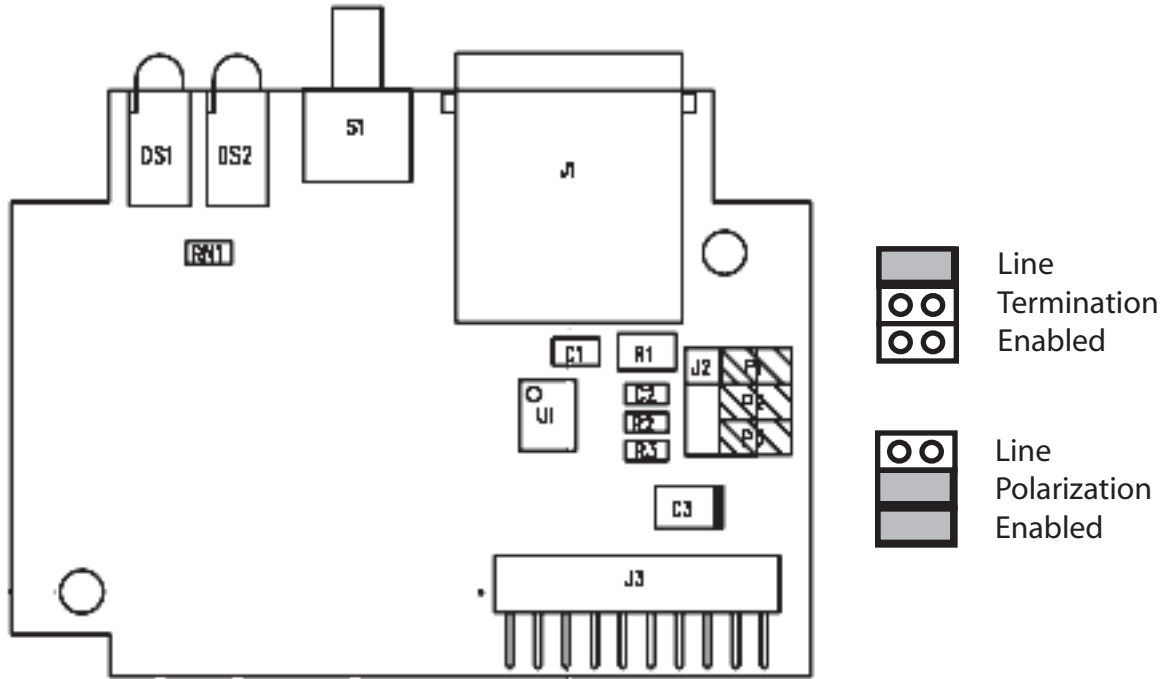
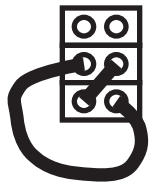


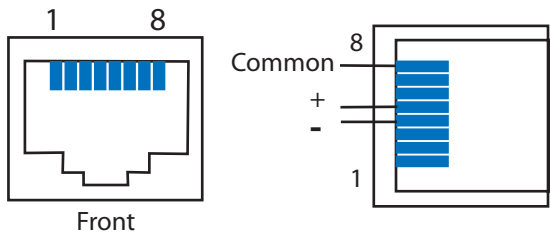
Control Solutions, Inc.
 Babel Buster 485 Technical Note
 5/2006



Modified Line Bias



RS-485 driver chips have A and B designated backwards from A and B as defined in EIA-485. This leads to a lot of confusion and mis-labeling. Babel Buster 485 has been no exception. Consequently the bias or line polarization is reversed. To connect Babel Buster 485 Rev B or earlier for correct bias, the bias header needs to be connected as illustrated here. Contact Control Solutions to obtain a jumper wire kit. Rev C boards and later may be jumpered per the user guide. In many cases, you do not need to connect the bias, and if connected, must only be connected on one node on the Modbus network.



Converting RJ-45 to screw terminal: The simplest way to do this is cut a cheap Ethernet cable in half. If the cable is wired using standard color coding, the solid brown wire will be common, white with blue stripe will be (+) and blue will be (-).

Positive (+) pin is also EIA-B or Modbus D1, non-inverting, driver chip A pin.

Negative (-) pin is also EIA-A or Modbus D0, inverting, driver chip B pin.