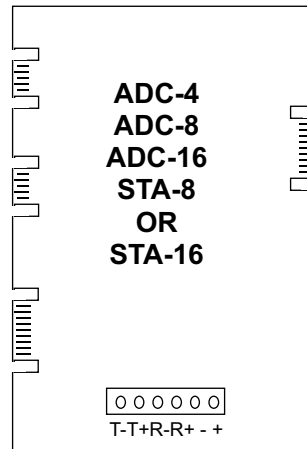


RS-485 TERMINAL CONNECTIONS

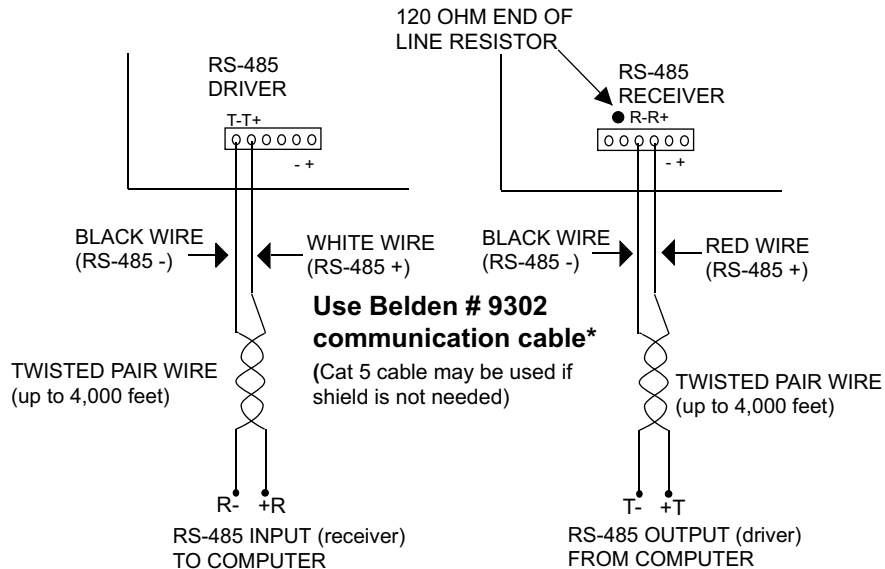


NOTE: On cards equipped with a resetting fuse, the fuse is the yellow disc located to the right of the terminal block. When the fuse is tripped due to a short or overload, the fuse may be reset by correcting the short and removing power for about a minute (or the fuse will reset automatically after the fuse cools). The Transzorb is the black part located above the terminal block.

TERMINAL BLOCK CONNECTIONS

- (T-) RS-485 Transmitter (-) (connect to black of white/black pair)
- (T+) RS-485 Transmitter (+) (connect to white wire)
- (R-) RS-485 Receiver (-) (connect to black of red/black pair)
- (R+) RS-485 Receiver (+) (connect to red wire)
- (-) Power supply input (use caution, reversed polarity may cause damage, 9 to 14 volts DC only)
- (+) Power supply input

NOTE: RECEIVER/TRANSMITTER PAIRS SHOULD BE TWISTED



NOTE: The use of shielding on the RS-485 interconnect cable is strongly recommended to protect the RS-485 receiver/driver ICs from damage which may be caused by electrical storm and lightning transients. The shield at both ends of the cable should be connected to an earth ground or an equipment ground (connected to your electric system ground via the third prong on the electric cord).

IMPORTANT CAUTION: The RS-485 signal standard is very forgiving of incorrect wire connections. The ADC-16 may appear to operate normally for a period of time (ranging from several hours to several months) even with incorrect polarity of the receiver/driver pairs or crossed wires (such as driver to driver or receiver to receiver or other combinations). **DOUBLE CHECK ALL WIRE CONNECTIONS OF THE TWISTED PAIRS.** The computer RS-485 driver (+) must connect to the ADC-16 receiver (+). The computer RS-485 driver (-) must connect to the ADC-16 receiver (-). The ADC-16 driver (+) must connect to the computer receiver (+) and the ADC-16 driver (-) must connect to the computer receiver (-). All end of line resistors must be in place (120 ohm resistor is installed on the ADC-16 or STA-16 at the factory - see above). Failure to correctly connect the receiver/driver pairs and/or failure to correctly install the end of line resistors will result in data errors and/or failure of the RS-485 receiver/driver ICs.

*Peel back cable at least 10" to verify twisting of cable pairs. The two black conductors can become cross paired which can not be detected by a continuity test. Cross paired wiring will cause intermittent data errors.