

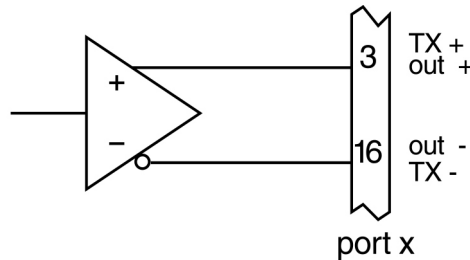
ADDENDUM TO OWNER'S MANUAL

MODEL 524 AND 525 MULTIPORT CONTROLLER WITH RS-422A INTERFACE (OPTION 17)

Each port of the 524 or 525 unit has been set up at the factory as either RS-422A or RS232C. The RS422A interface circuit includes a differential line driver, a differential line receiver, and an optional termination resistor. Each port utilizes the RS-232C handshake lines in both the RS-232C and the RS-422A configuration.

LINE DRIVER

The differential outputs are balanced and designed to drive long lengths (up to 4000 ft.) of coaxial cable or twisted pair transmission lines with characteristic impedances of 50 ohms to 500 ohms. The complimentary outputs, out + and out - , are located on pins 3 and 16, respectively, on each port.. See figure below.



LINE RECIEVER

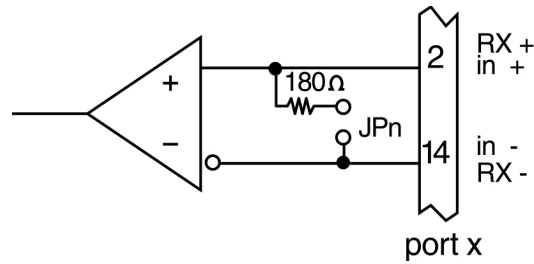
Each port has a differential line receiver for balanced digital data transmission. Each receiver includes a 180 ohms terminating resistor, which may be used optionally on twisted pair lines.

A jumper must be installed for each port on the connector board to include the 180 ohms terminating resistor on each receiver.

Jumper installation for the termination resisor:

- 1. Remove power form the unit**
2. Remove the top cover with a Phillips head screwdriver.
3. Locate jumper positions shown on the attached mechanical.
4. Solder a jumper wire on the ports which need the termination resistor.

The differential inputs, $in +$ and $in -$, are located on pins 2 and 14, respectively, on each port. See figure below.



GROUNDING

Each port provides a signal ground and a case (protective) ground. Signal ground is located on pin 7 and case ground is located on pin 1.

INTERCONNECTIN CABLE

The characteristics of the interconnecting cable are not specified. To ensure proper orientation, however, paired cable with metallic conductors should be employed (preferably twisted pair). The performance of any interconnecting cable used must be such as to maintain the necessary signal quality required for the application.

If necessary for system consideration, shielded cable may be employed. When employed, the shield shall be connected only to case ground at either or both ends depending on the specific application.