

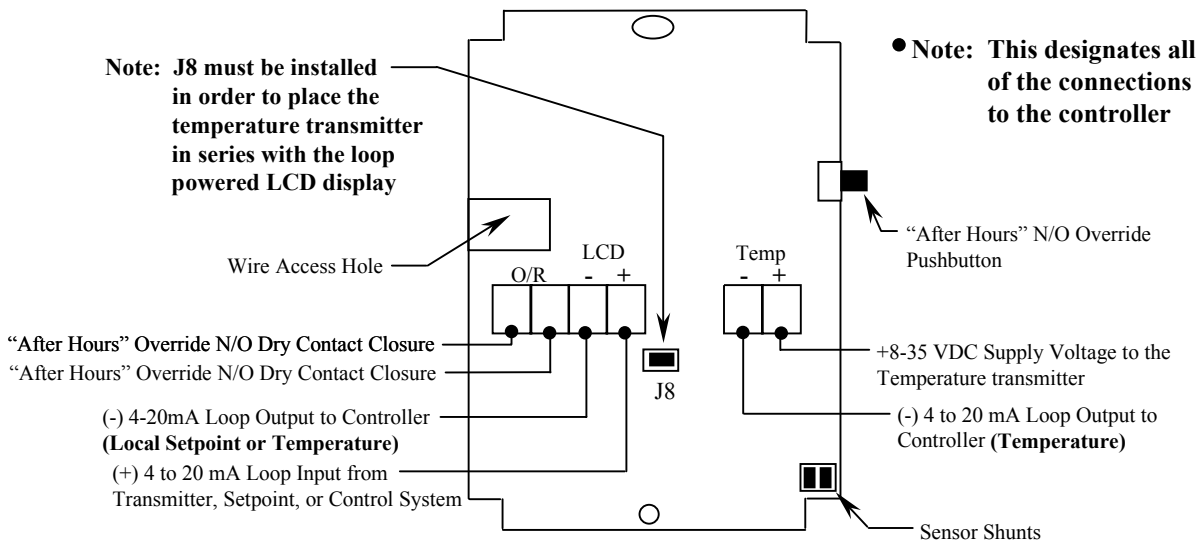
**READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION**

The ACI/TT-RSO-LCD is a 2-wire Loop Powered device that must be powered with an +8 to 35 VDC supply voltage for both the temperature transmitter and the 4 to 20 mA adjustable setpoint. The display is powered from the current loop from the temperature transmitter.

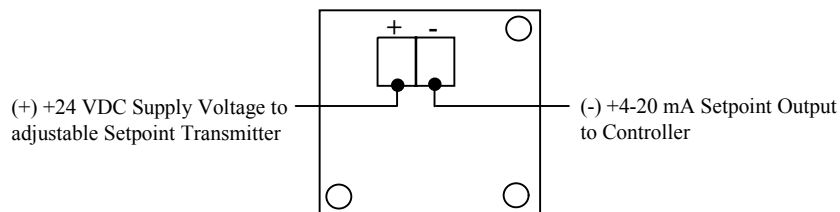
**■ TROUBLESHOOTING**

- |  |   |
|--|---|
| Temperature Transmitter Not Working <input type="checkbox"/>   | Power supplied to transmitter (+), Verify that there is a common ground       |
| 4 to 20 mA Setpoint Not Working <input type="checkbox"/>   | Power supplied to Setpoint (+), Verify that there is a common ground          |
| Temperature Transmitter Reading High <input type="checkbox"/>  | Verify that the (2) shunts are on the headers in the lower right hand corner  |
| Display Not Working <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>                               | Verify that the Jumper on J8 is on. This completes the loop from the          |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | temperature transmitter to the display. Verify that the display is plugged in |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | correctly.  |

**■ WIRING DIAGRAMS**



**4 to 20mA Setpoint Wiring Diagram (Board on Back of Housing)**



**■ WIRING CONNECTIONS**

A minimum of (2) to a maximum of (8) wires must be pulled for the ACI/TT-RSO-LCD to work properly. All of the Setpoint connections are to be made to the board on the back of the housing. Be aware that the terminals are polarity sensitive. ACI recommends the use of 18 to 22 AWG twisted pair wires or shielded cable for all sensor installations. Verify that all connections are made correctly before turning on the power to the transmitter.

**Note: When using the temperature transmitter and the LCD only, 2-wires are needed. Connect the +8 to 35 VDC power supply to the terminal labeled (+ TEMP) and the 4 to 20 mA current loop output to the controller should be connected to the (-) terminal of the LCD terminal block. Make sure that Jumper J8 is on.**

All ACI/TT and TTM temperature transmitters are non-polarity sensitive. That means that, the positive and negative outputs of the power supply can be connected to either side of the power terminal block.

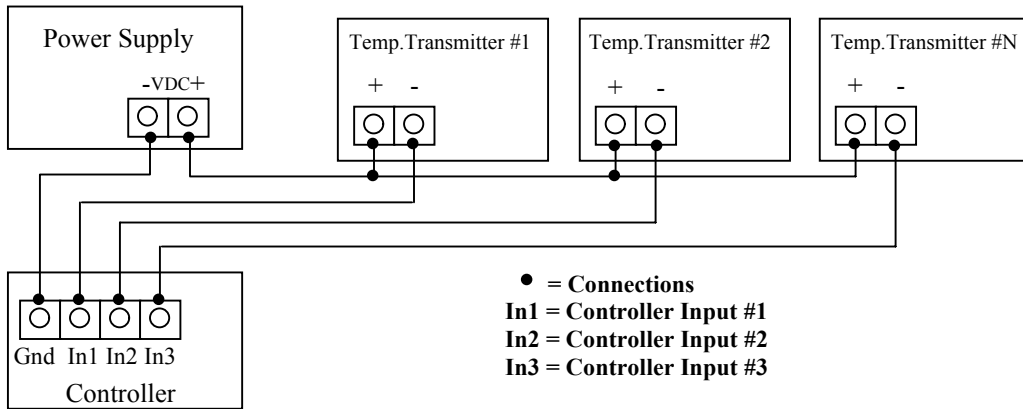
$$N = I / 22mA$$

where:  $N$  = number of transmitters  
 $I$  = current available from power supply  
 $22mA$  = maximum current draw of transmitter

e.g., If  $I = 1.5A$  then:  
 $N = 1.5/22mA$   
 $N = 68$

Therefore a 1.5A power supply will safely power up to 68 transmitters.

**SYSTEM WIRING DIAGRAM**



**ROOM TEMPERATURE TRANSMITTERS**

This unit is suitable for either drywall or junction box mounting. First, remove the cover of the enclosure and mount the base of the Room unit to the wall, using the (2) 6/32" x 1" screws that are provided. Once the base is mounted to the wall, make all of the proper connections and then place the cover back onto the unit. Now fasten the cover, using the (2) 1/16" Allen screws located at the bottom of the enclosure.