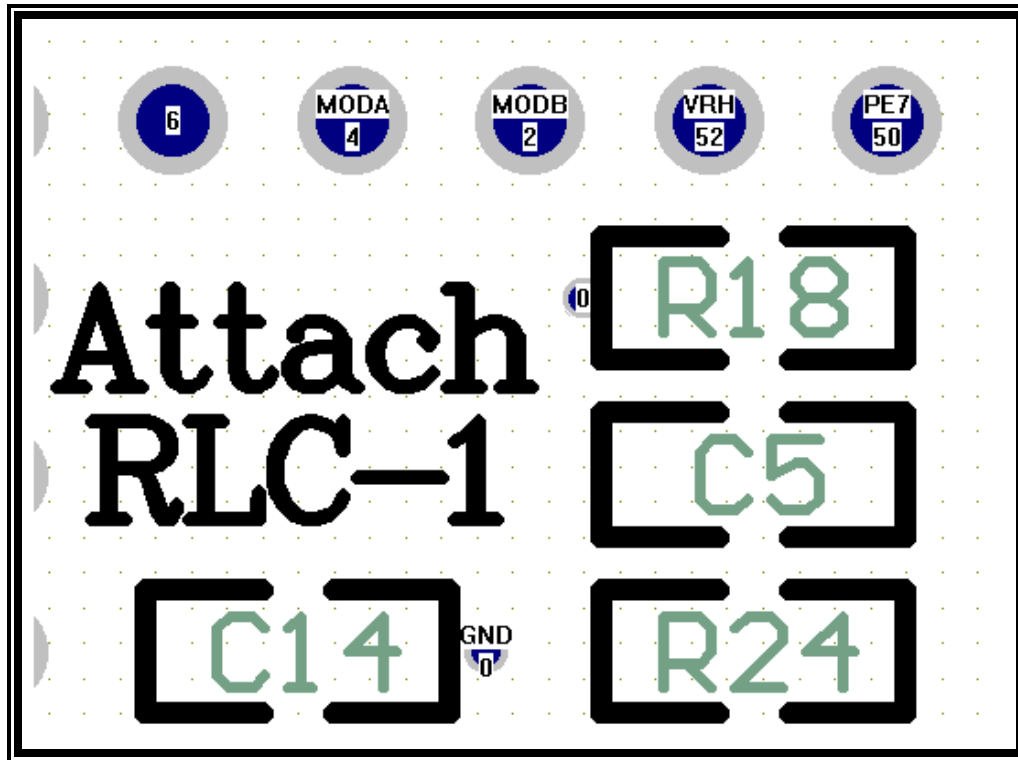# Correcting the Analog Input Reading Error

Tools Needed:
- Soldering Iron (Low wattage)
- Small piece of jumper wire. 20 gauge and higher is recommended

Steps for using the RLC-1's analog reference voltage

1) Power off the RLC-1+ controller board

2) Locate the area of the board where the *Plus* board interfaces to the RLC-1 board. You will see the nomenclature "Attach RLC-1" on the board. See the above diagram for parts location.

3) Remove components R18. This part is a surface mount chip resistor. The easiest method to remove the part is to have your soldering iron and solder touch both sides of the part. Once the solder is touching both sides of R18 simply wipe the part off of its pads.

4) Remove components R24. This part is a surface mount chip resistor. The easiest method to remove the part is to have your soldering iron and solder touch both sides of the part. Once the solder is touching both sides of R24 simply wipe the part off of its pads.

5) Solder a small wire from pin 52, VRH (located directly above R18) to the right side of R18. You will notice the right hand side of R18 is connected to C5 and then connected to R24.

The voltage at the newly connected point is 4.00 volts. This provides a better voltage reference to the analog conversion part of the uProcessor. If you do not measure 4.00 volts check your connections. Your analog system should now read correctly.

Contact Link Communications, Inc. if you have questions in making this modification.
Technical Support: (406) 245-5002   Internet: http://www.link-comm.com