

CTC AppNotes

A series of technical documents written by members of the CTC community

Five Quick Troubleshooting Tips

Sometimes a quick check of some basic items can save a lot of time, energy and money. Here are five easy checks that we sometimes assume have already been done, but maybe weren't...

1. Double check your wiring.

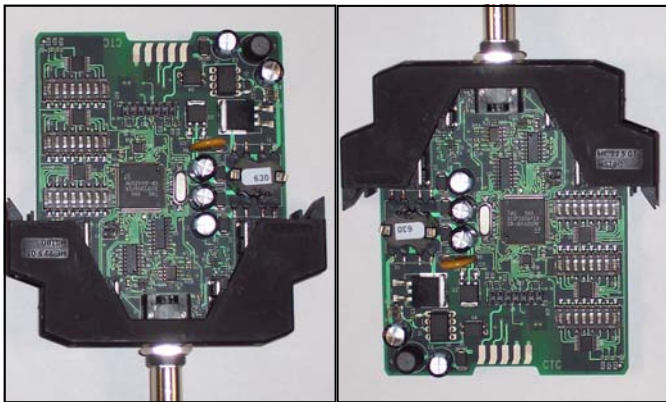
We all are human. Everyone at one time or another has said "I guarantee I put the red wire in the positive and the black wire in the negative..." only to go back and double check... and have to switch two wires back to where they should be.



With hundreds of wires in an enclosure it is easy to switch one or two.

2. Make sure you are speaking the same language, also known as "Your 'up' maybe different from My 'up'."

Sometimes parts can be confusing. When changing dip switches or calling connectors like BNC's male and female, it is always a good idea to put the way you may be holding something in a larger context. Check to make sure that "UP" means the same



Circuit boards may have printing facing more than one direction. This can cause errors in communication and create a false diagnosis of problems.

thing to both parties in a discussion.

3. Read the manual

Most guys, your author included, would rather 'figure it out' than read the manual. After all most things seem pretty straight forward. Like the module I tried to



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install the other day where I said to myself if I tighten these screws first I can adjust the settings afterwards. Only to be unable to reach the adjusting point on the module unless the screws were loose (just like the manual said)...

4. Double check your installation

No matter how careful we are we can all get distracted. A loose sensor or improperly installed cable can produce what may look like a terrible vibration. A vi-



Long loose section of cable resting on a cross pipe can actually transmit non-relevant vibration into the sensor.

bration that just might disappear as soon as the cable is tightened down or the sensor is tightened up.

5. Listen to your instruments

Don't assume the instrument is wrong if it starts out showing a dangerous reading when first installed. Recently one of our tech support agents got a call to return a sensor from a customer that had just installed four 4-20mA LP sensors on identical pumps. Three pumps all had low levels of vibration as expected, but the fourth showed double the vibration of the other pumps. The end user assumed that the sensor was bad because (a) three other sensors on identical pumps were reporting normal vibration; (b) the pump had been running fine for almost 2 years and (c.) it was a Friday afternoon and everything would be all right till next week. Over the weekend the pump with the suspect sensors failed.

If you have any questions or for further information please contact CTC directly via Email at dgripe@ctconline.com or jsmith@ctconline.com or feel free to call 1-800-999-5290 in the US and Canada or +1-585-924-5900 internationally.

If any CTC vibration analysis hardware product should ever fail, we will repair or replace it at no charge.