

## Symptom:

The temperature input(s) on a thermostat is(are) not reading or tracking the actual temperature properly.

## Cause:

There are many reasons why a temperature input might be "off": Wire resistance, placement of the device, over voltage or under voltage, wireway hole not sealed, etc....

## Solution:

Calibrate the temperature input:

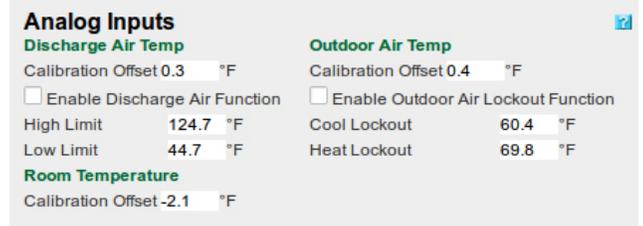
1. Install the product and wire all inputs and outputs that the unit will control. Allow the device to acclimate to its surroundings for 15-20 minutes.



2. Place a simple thermometer (see note to the right) on top of the unit with the end that senses the temperature hanging over the edge. DO NOT USE A TEMPERATURE GUN. A temperature gun reads the surface temperature of whatever the gun is aimed toward, not the air temperature. And, we want to measure the air temperature.



3. Modify the Calibration Offset value for the desired Temperature Input by adding or subtracting the required amount. This can be done on the programming page of the device within Ubiquity (see screenshot shown below) or using TCS Insight. Please reference Technical Support Bulletin 1019 for detailed instructions on using TCS Insight to calibrate sensor inputs.



4. Let the thermostat stand for 5 minutes and recheck. Repeat step 3 as needed until the thermostat tracks with the thermometer.



**NOTE: TCS recommends a recalibratable thermometer, something certified by the FDA or NIST.**

*To recalibrate the thermometer, immerse the stem at least 2" in a liquid of known temperature, in this case ice water (32 Deg. F.) was used. Determine the degrees of inaccuracy, and follow the manufactures calibration instructions to adjust to proper temperature.*

