ARGUS
Total Power Solutions
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Cordex Controller Temperature Calibration

Summary

This procedure describes temperature probe/s calibration within the CXC Controllers.
In the examples below the T1(GP1) will calibrated by **LCD Touch Screen** and **Web Interface**.
GPx and Tx will be used interchangeable.

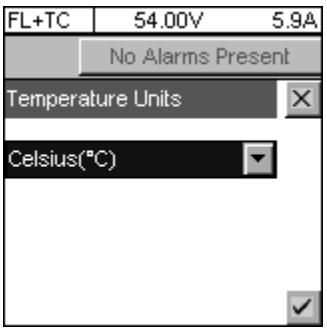
Tools Required

- Ice bath, Thermometer(optional), Cloth
- Voltmeter, Hand Tools

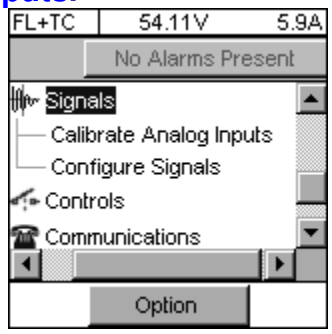
LCD Touch Screen

Low Point Calibration:

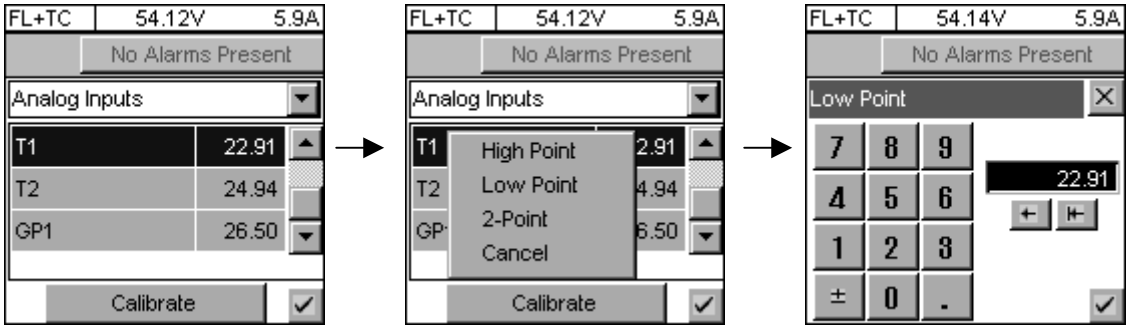
1. Login to the controller and go to **System Info > Temperature Units** to verify CXC controller temperature unit.



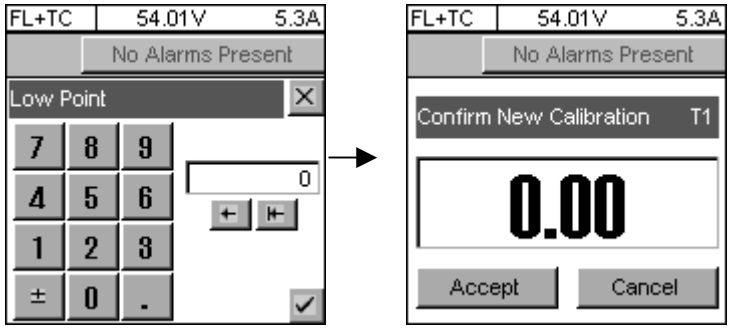
2. Prepare Ice bath by adding a small amount of water to container filled with ice.
3. Remove temperature sensor/s from battery string and immerse it in ice bath, allowing enough time for the probe to stabilize at the new temperature ~ 10 minutes.
4. Go to **Signals > Calibrate Analog Inputs.**



5. Scroll down and tap **T1(GP1)** to select and tap **Calibrate** button then select **Low Point**.



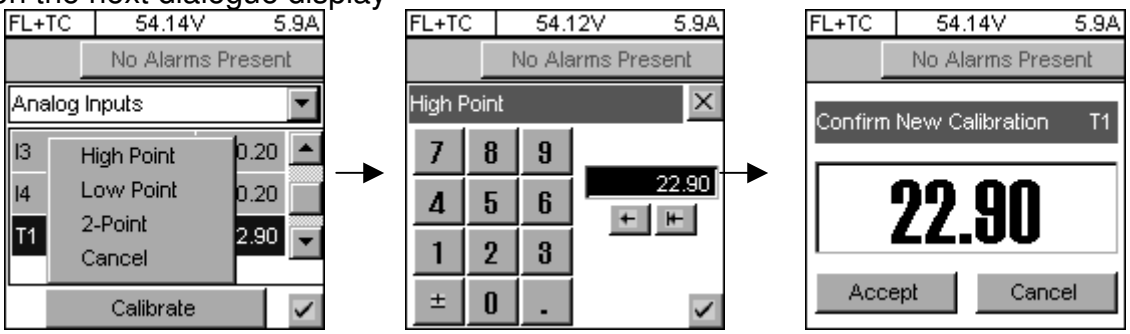
6. With a digital voltmeter, measure and record the voltage reading across the T1 (T2 or GP1 and GP2).
7. To convert the sensor voltage reading to temperature, enter the measured voltage to equation (1) below:
    1. **$(V_{sensor} - 2.73) * 100 = \_\_\_^{o}C$**
    2. **$[(V_{sensor} - 2.73) * 180] + 32 = \_\_\_^{o}F$**
8. Enter the converted temperature value as the Low point data, you could also use a thermometer to verify.
   Tap on √ at the bottom right corner and the **Accept** button on the next dialogue display.



9. Remove the temperature sensor/s from ice bath, dry it and reconnect it to the batteries allowing ~10 minutes for temperature stabilization.

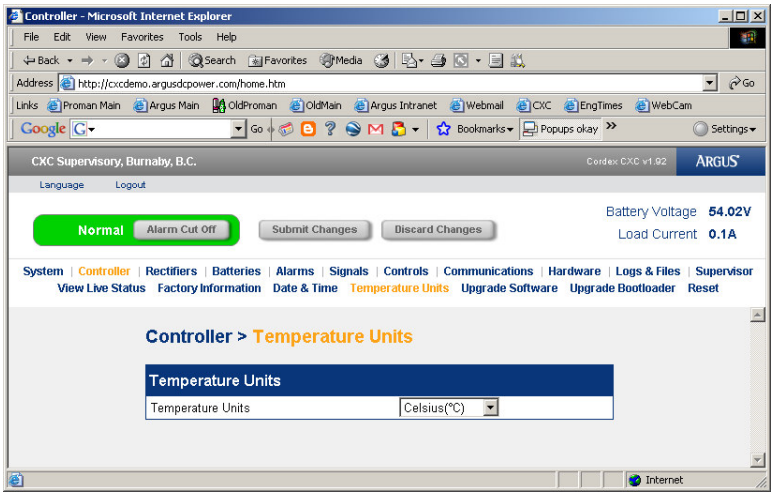
High Point Calibration:

10. With the digital voltmeter measure and record the voltage across **T1(GP1)**.
11. Convert the voltage reading to temperature by using the above equation line 7.
12. Use the temperature value as a High point data. Tap on √ at the bottom right corner and the **Accept** button on the next dialogue display

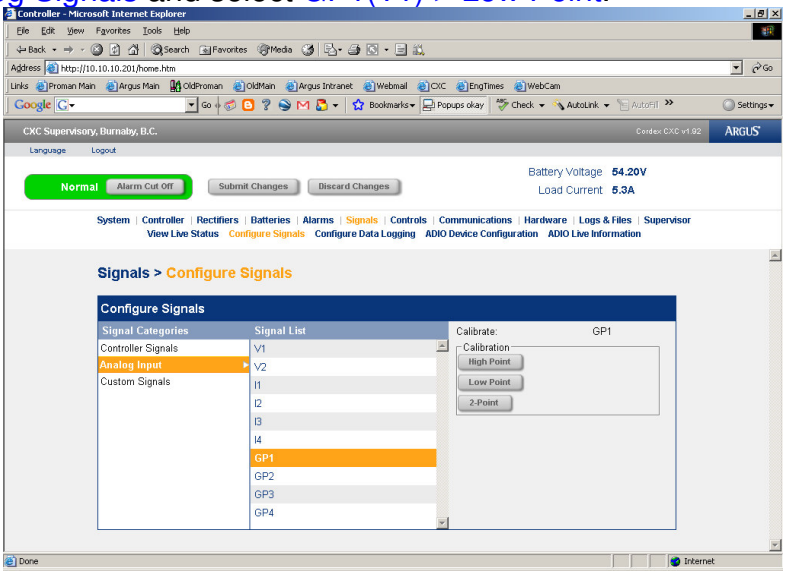


Web Interface

1. Log into the controller and go to Controller > Temperature Units to verify CXC controller temperature unit.



2. Prepare Ice bath by adding a small amount of water to container filled with ice.
3. Remove temperature sensor/s from battery string and immerse it in ice bath, allowing enough time for the probe to stabilize at the new lower temperature ~10 minutes.
4. Go to Signals > Analog Signals and select GP1(T1) > Low Point.



5. With a digital voltmeter, measure and record the voltage reading across the GP1.
6. To convert the sensor voltage reading to temperature, enter the measured voltage to equation (1) below:
    1. **(Vsensor – 2.73) * 100 = oC**
    2. **[(Vsensor – 2.73) * 180]+ 32 = ___ oF**
7. Enter the converted temperature value as the Low point data, you could also use a thermometer to verify,
   then press Next followed by Accept.
8. Remove the temperature sensor/s from ice bath, dry it and reconnect it to the batteries allow ~10 minutes for temperature stabilization.

High Point Calibration:

9. With the digital voltmeter measure and record the voltage across T1.
10. Convert the voltage reading to temperature by using the above equation line 7.
11. Use the temperature value as a High Point data then press Next followed by Accept.

Thank you for choosing Argus Technologies