



Checking the Electronics on the Reliadens™

If you have confirmed that your system is properly installed, both mechanically and electronically (see Technical Note 1.1 for proper grounding instructions) follow these steps to check the systems electronics and make any possible adjustments. Note all of the measured values after each step. If any of these measurements are NOT within an acceptable range call III Sigma.

You will need to print this document off your computer to fill it out. Complete the following procedure form and fax it to III Sigma for review in order to make an educated decision about any further steps to be taken. (Fax: 785- 843-7445)

1. Let the system run for at least 15 minutes.
2. If possible, make sure the plant is in a normal operating mode. i.e. temperature, vibration, noise, etc...
3. Put the unit in the calibration mode.
4. Confirm that the amplifier boxes are supplied with the same clean 120VAC or 240VAC as the controller. Using a multi-tester at the amplifier box to check wires 5+, 2- for the correct voltage (+/- 5VAC).

_____ = VAC, output of 5+, 2-.

5. Make sure the power (pwr) side of the tare board reading 10VDC.

_____ = VDC, power to the tare board.

6. Check the input "in" side of the tare board (the signal from the load cell) to make sure it is between 10-15mV.

_____ = mV, at the input of the tare board.

7. Measure the output "out" side of the tare board and make sure it reads 0mV. If it does not read 0mV, you can adjust the output with the trimpot on the tare board until it reads 0mV.

_____ = mV, at the output of the tare board before adjustment.

_____ = mV, at the output of the tare board after adjustment.



8. Make sure the output of the amplifier (wires 9+, 10-) is between 0-30mV. It is normal to see some fluctuation of this value. If the value needs to be adjusted, use the tare board trimpot. DO NOT use the trimpots on the amplifier, this can affect range and span values that are preset at the factory.

_____ =mV, at wires 9+, 10- before adjustment.

_____ =mV, at wires 9+, 10- after adjustment.

Company : _____ Date : _____

Person in charge : _____

Procedure for Electrical Troubleshooting

Before you proceed with these tests, confirm the following items:

1. The unit has 45-50 PSI of clean dry air.
2. The unit has clean 120VAC power with a single ground point.
3. The unit has been running in a normal operating mode for at least 30 minutes.
4. The plant is in a normal operating mode.
5. Data and Power wiring in separate conduit.

Procedure:

For this test you must be in calibration screen and do the test twice, one without weight in cup (Cup up & empty) and one other with weight in cup (Cup up with weight added).

To reach the calibration screen:

1. From the operating screen press RETURN
2. Press CALIB, What is the value displayed? _____ (1)
(You are in calibration now)



For each test:

1. Take the different voltages without weight in the cup
2. Take the different voltages with weight in the cup

Please report here the data displayed on the calibration screen : _____ (1)

Controller Box

Checking Data	Where	Voltage (Cup up, Empty)	Voltage (Cup up, Full)
Input CH1	Between ch1 + ch1-- Eason Controller	V	V
Input CH2	Between ch2 + ch2-- Eason Controller	V	V

Amplifier Box

Checking Data	Where	Voltage (Cup up, Empty)	Voltage (Cup up, Full)
Loadcell Output	Between ch1 + ch1-- Eason Controller	mV	mV
Tare Board Output	Terminal Block "OUT" on tare board	mV	mV
Excitation	Terminal Block "PWR" on tare board	V	V
Amplifier Output	Terminal Block "OUT" on general terminal block in amplifier box	V	V

These checks have been done by _____

This data will help us to confirm what parts of the system we need to focus on. Please fax a printed copy of this Checklist and we will review the data and let you know what do next.