SMART SENSOR USER INTERFACE ADVANCED A
PRODUCT INSTRUCTIONS

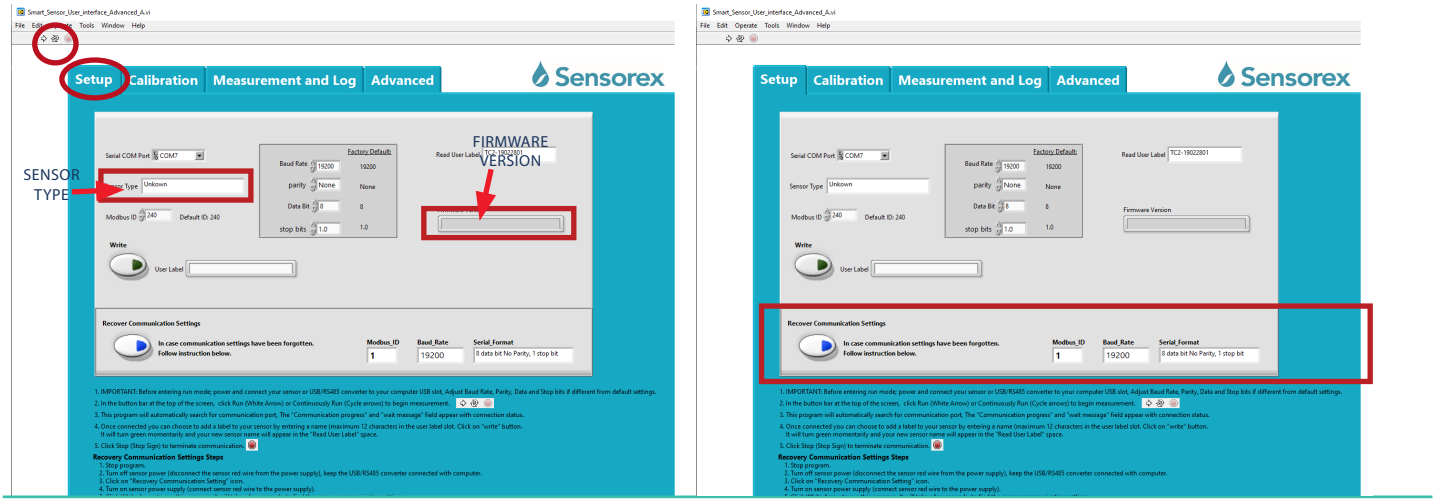
INTRODUCTION

The Smart Sensor User Interface Advanced A software allows simple communication, calibration, monitoring and configuration of Sensorex smart sensors

Follow the link below to download, unzip and install the software.
https://sensorex.com/product/sensorex-smart-sensor-user-interface-software/

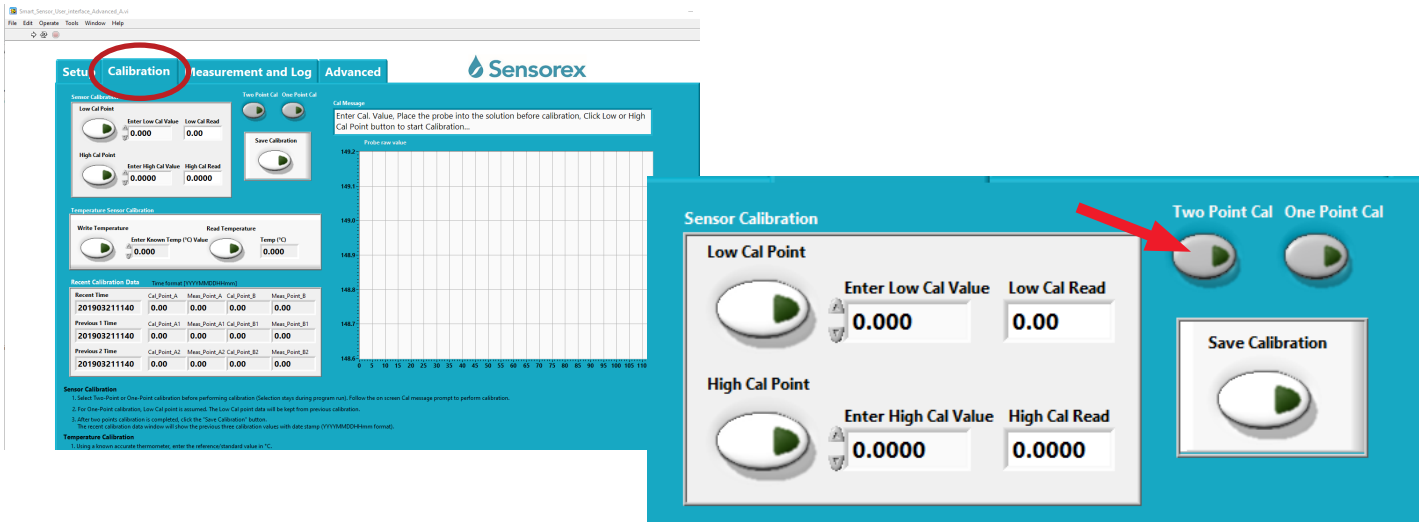
COMMUNICATING WITH YOUR SMART SENSOR

Open the software interface to the Setup tab. Press the Right arrow or continuous run arrow to start communication. The sensor type will appear in the "Sensor Type" window. The Firmware version will shown in window as well. If the sensor does not communicate you can use the "Recover Communication Settings" in box below.



CALIBRATION OF YOUR SMART SENSOR

Open the software interface to CALIBRATION tab. First, click "Two Point Calibration" button. Button will light up green.



Products covered by this manual: *Smart Sensor User Interface Advanced A*

INSTR-SMARTSENSORUSER
INTERFACE ADVANCED A - REV 02092024

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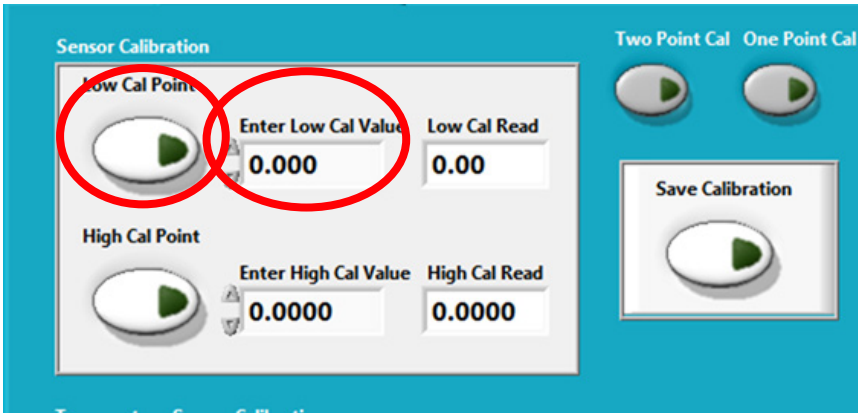
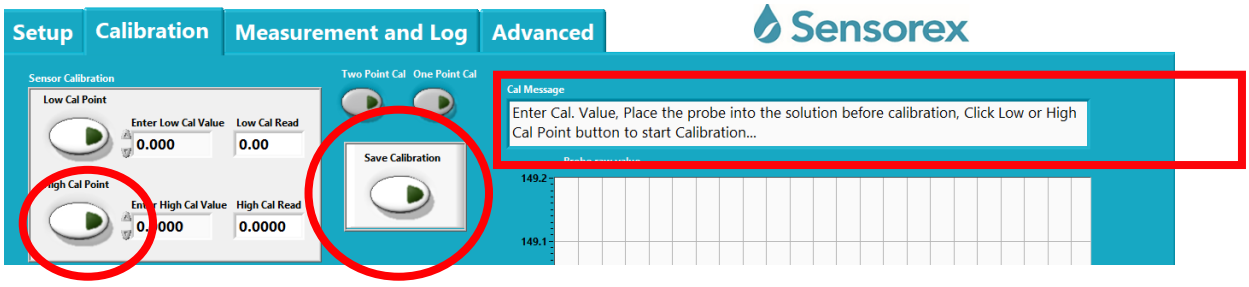
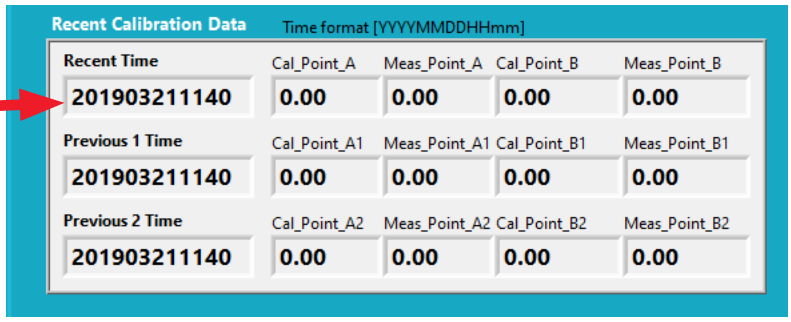
First, click the "Low Cal Point" button. It will light up green, Next, For pH, enter 4.01 as "Low Cal Value" in window above. For Conductivity, hold sensor in the air then enter "0". For FCL and CLD, enter "0". For DO, choose "One Point Cal".



Once the reading is stable un-click the "Low Cal Point" button. Follow CAL MESSAGE window instructions. Press High cal point button (if pH use pH7 or pH10, if Conductivity choose solution > than your expected range). Once the reading is stable un-click the button. Lastly, click the "Save Calibration" button. Wait for CAL MESSAGE to confirm calibration is done. Calibration values will be written to the top of the table.



NEWEST VALUE WILL BE WRITTEN TO TOP LINE



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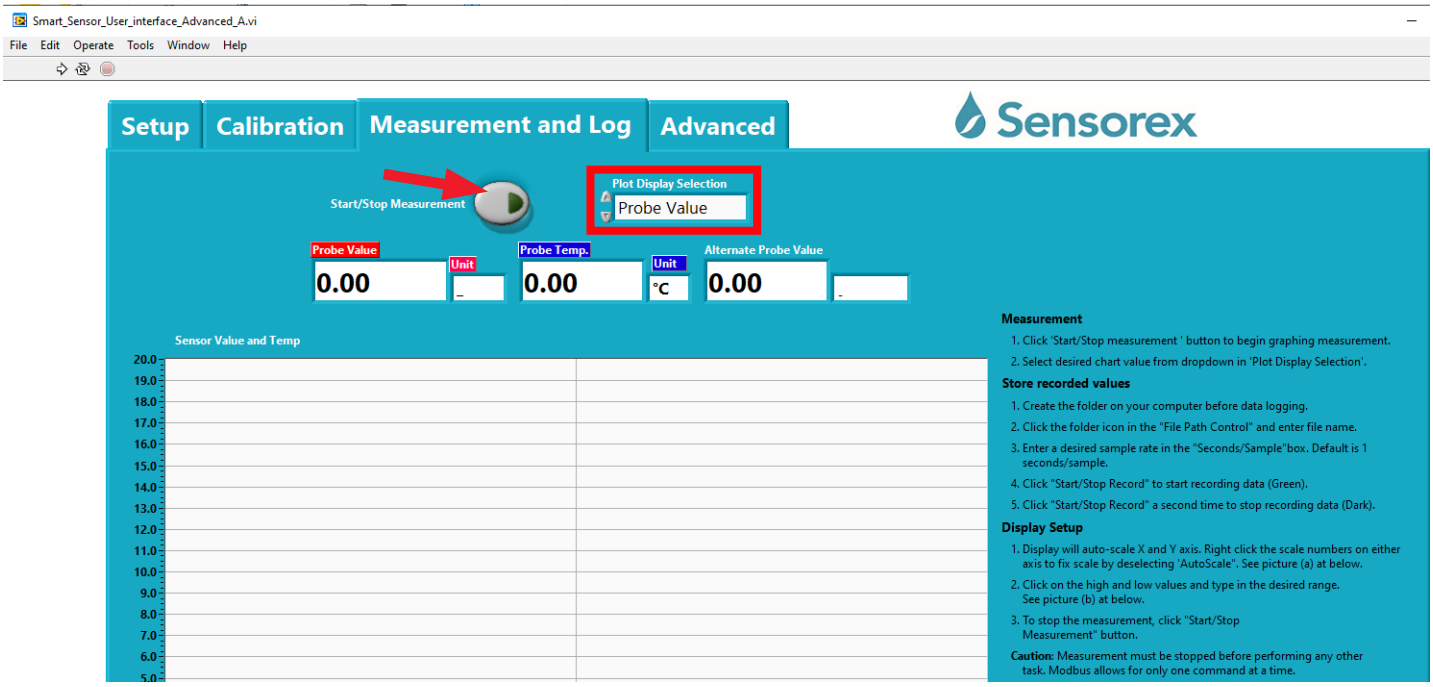
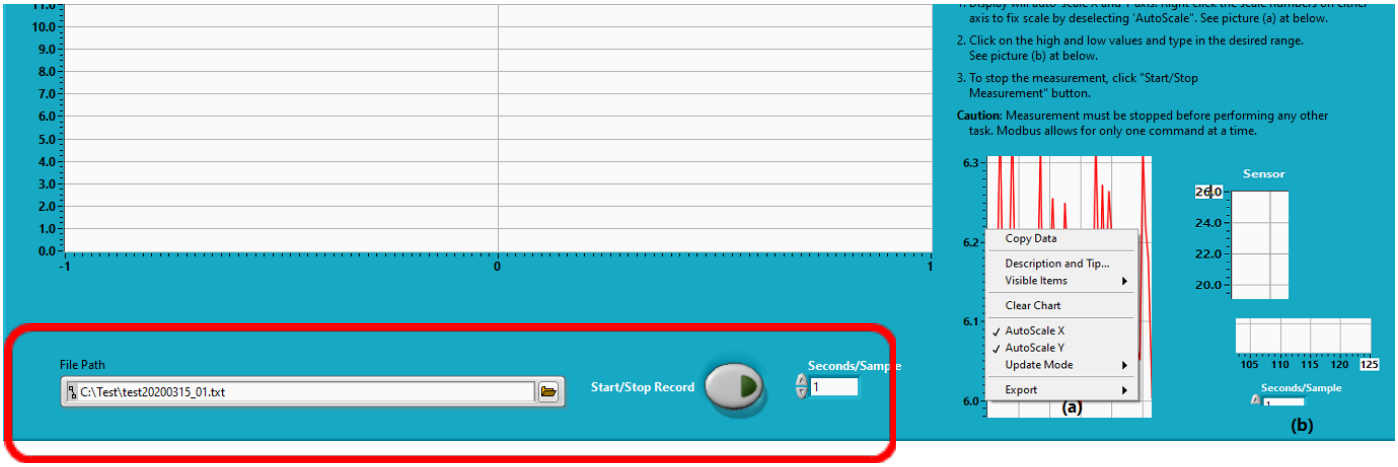
MEASUREMENT AND LOG OF YOUR SMART SENSOR

Go to the Measurement and Log tab. Set value to measure as "probe value" or "temperature". Press "Start/Stop Measurement" button. It will turn green.



If values are as expected than you can monitor the value you want in the windows and on the graph. The graph range is auto-ranging.

Sensor data can be saved using the "File Path" at bottom of the screen. Set first the "seconds per sample". Next, uses the "Start/Stop Record" button to determine the time interval you will capture the sensor data. You can then the data as a .txt file and choose the location you want in the "File Path" window



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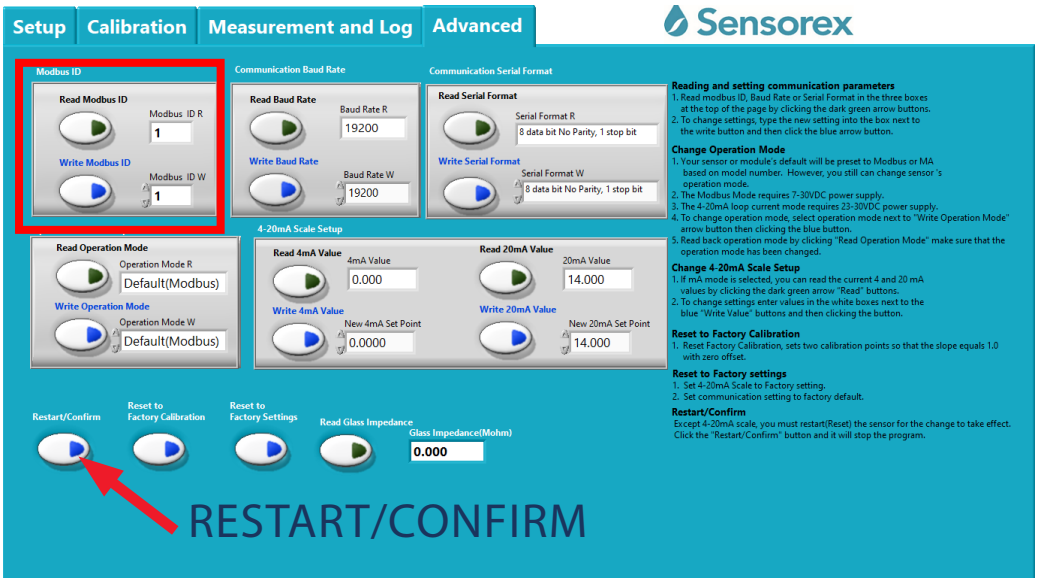
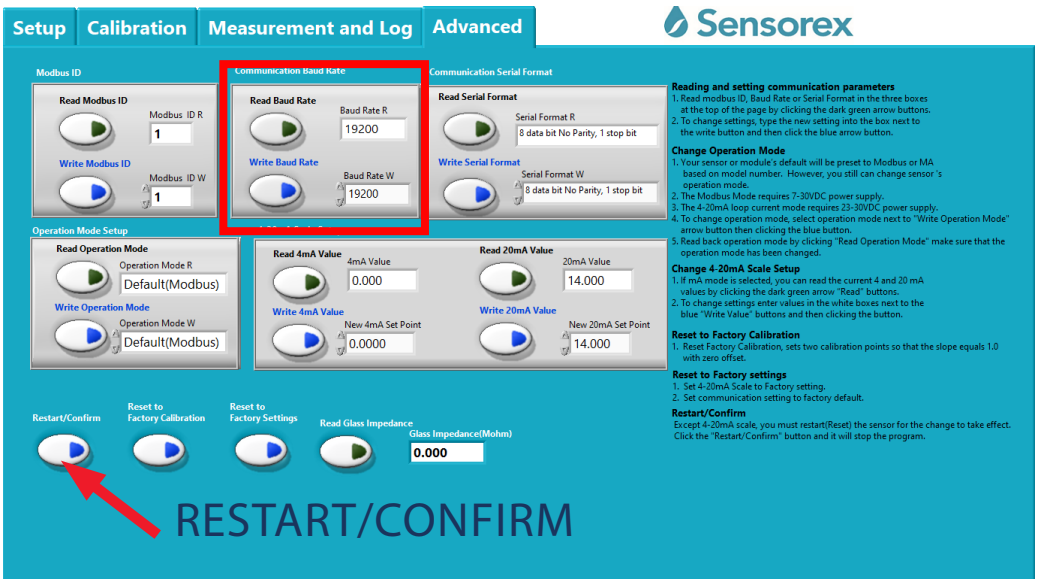
READ/WRITE MODBUS ID



READ/WRITE BAUD RATE

First, read Baud Rate, in Red square. It will say 19200 as factory preset . Next write Baud Rate change to "9600"

(circled). Last, press "Restart/Confirm" to restart sensor and save the Baud rate change to the sensor's memory.



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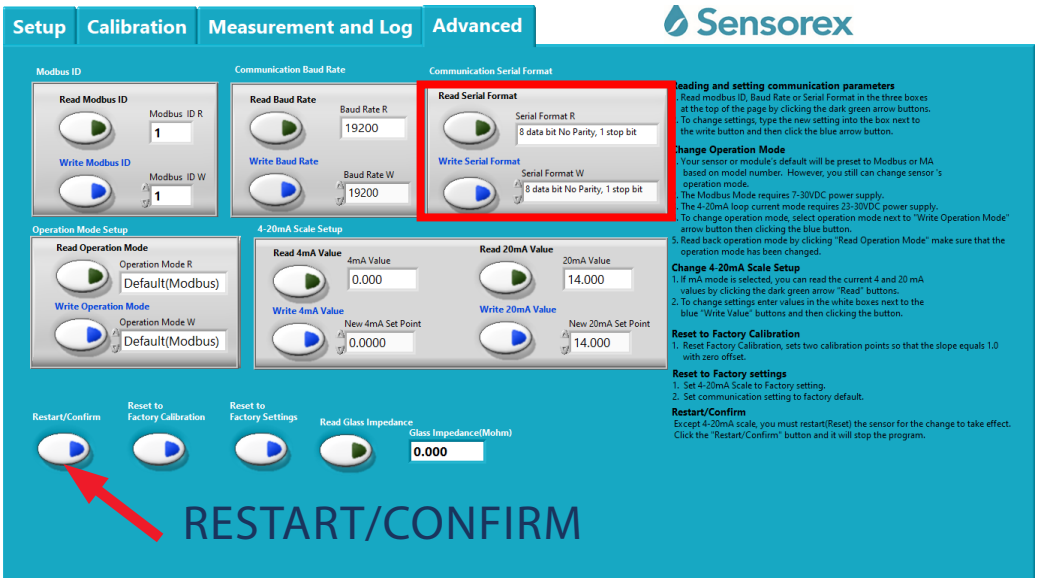
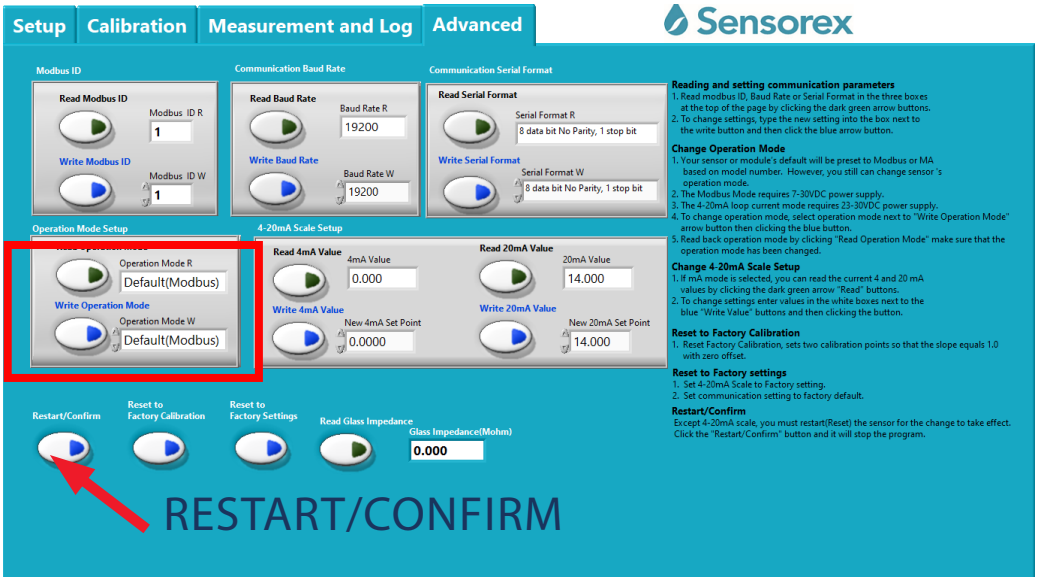
READ/WRITE SERIAL FORMAT

First, read “Read Serial Format”, in Red square. It will say 8 data bit No Parity, 1 stop bit” as factory preset . Next write desired serial format. Last, press “Restart/Confirm” to restart sensor and save the Baud rate change to the sensor’s memory.



READ/WRITE OPERATION MODE

First, read “Read Operation Mode”, in Red square. Options are Default(Modbus) or 4-20mA . Next write desired operation mode. Last, press “Restart/Confirm” to restart sensor and save the Baud rate change to the sensor’s memory.



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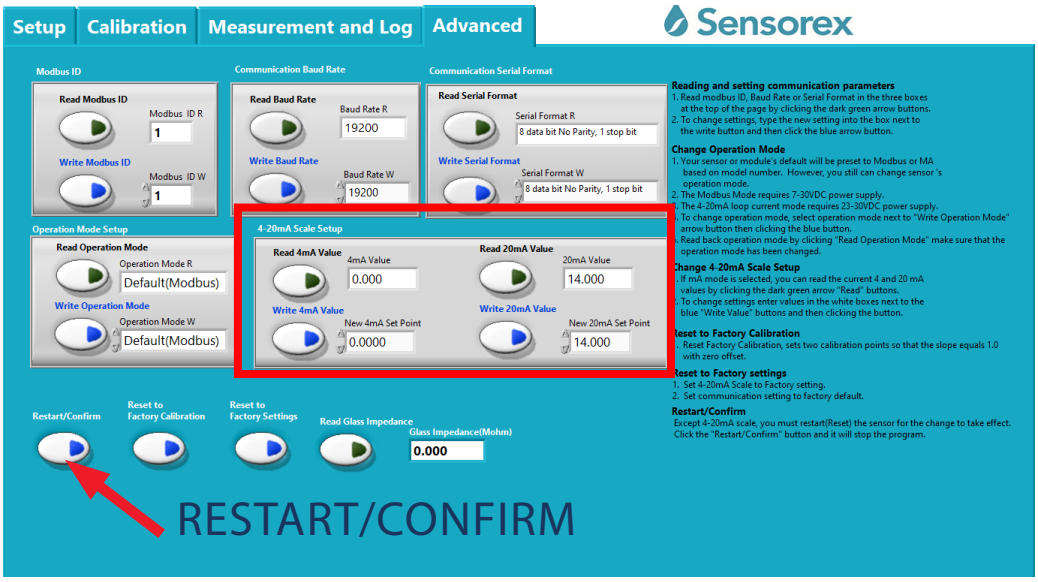
READ/WRITE 4-20MA SCALE SETUP

First, read "Read 4mA" value in Red square by pressing the "Read 4mA button. Button will light up green and then go off and value will be displayed in the window. Next write "0" for pH, Conductivity, dissolved oxygen, free chlorine or chlorine dioxide in the "Write 4mA" window. Then press the "Write 4mA" button. Button will light up green then go off when value is written to sensor memory. Repeat the process for 20mA read and write. Last, press "Restart/Confirm" to restart sensor and

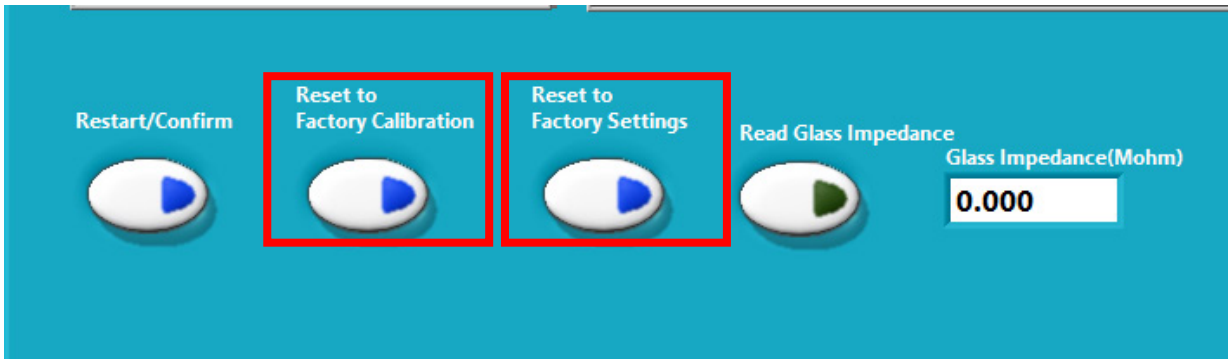
save the change to the sensor's memory.



RESET FACTORY CALIBRATION/RESET FACTORY SETTINGS

By pressing "Reset to Factory Calibration" you will remove any written data from the sensor memory. Note that the last 3 calibration values are written to the sensor's memory. Only Reset factory calibration if you are having trouble with standard

calibration. "Reset to Factory Settings" can be used if the sensor requires a complete reset.



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TROUBLESHOOTING

COMMUNICATION:

If sensor does not communicate using the software:

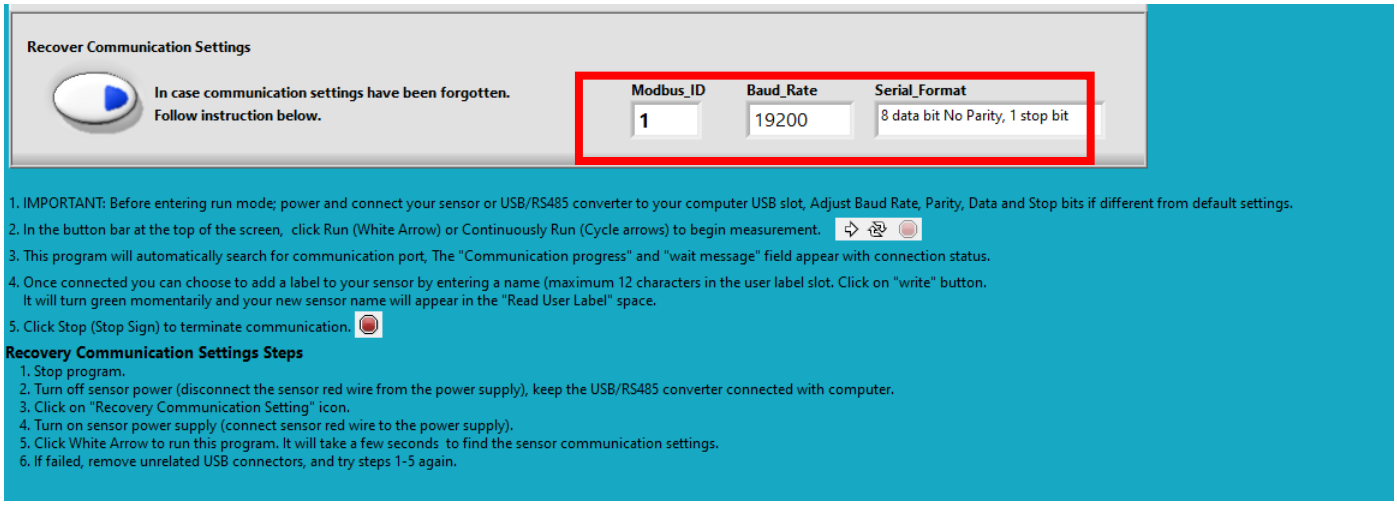
a)check to make sure sensor Modbus wires are correct: white Modbus A, green Modbus B

b) check to see you have the correct sensor id.

c) check to see if you have the correct baud rate

If communication still does not work and all connections and settings are correct then go to: recover communication settings" on setup tab. Follow instructions:

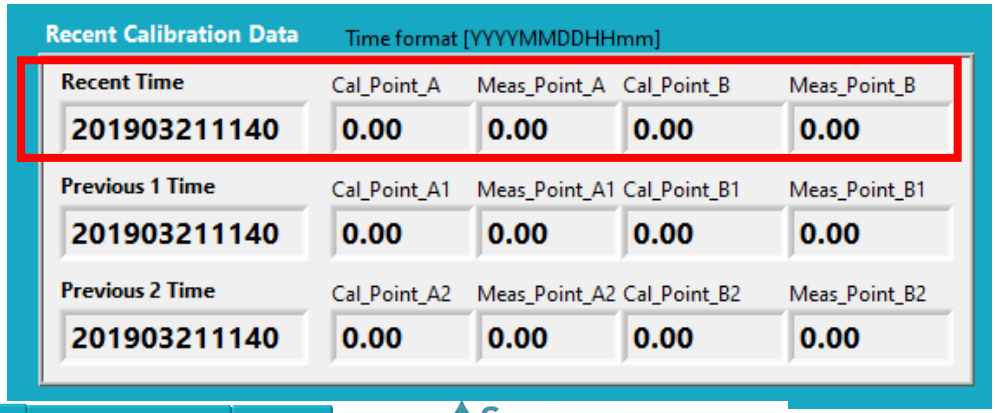
Stop the program by pressing the stop button on the top of the interface screen. If successful, the correct Modbus ID, baud

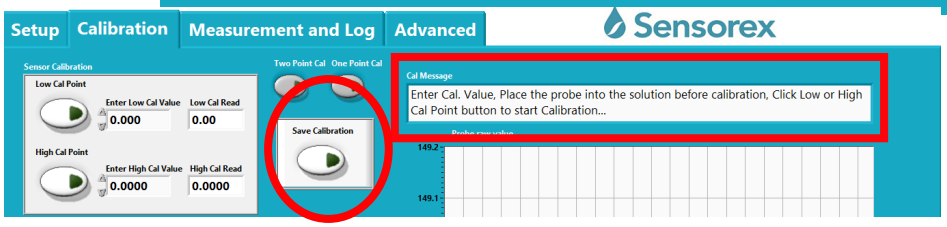


CALIBRATION:

If Calibration values did not get written to the sensor's memory chip:

The "SAVE CALIBRATION" button was not pressed after the calibrations were complete. See "Cal Message"" screen to know when the calibrations were complete. You will also see the green "Low Cal Point" or "high point light go off.





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