



**L**INEAR **M**EASUREMENT **I**NSTRUMENTS, Corp.

Research, Development and Manufacturing of Precision Measuring Systems

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**CALIBRATION/MASTERING INSTRUCTIONS FOR LMI 200-S/200-SB TO INTERFACE  
WITH GAGETALKER & VSPC SOFTWARE VERSION 2.21 “ALPHA” WHEN USING LMI  
234, 235 AND 236**

**REQUIRED EQUIPMENT:**      ENDURA  
   Visual SPC Version 2.21 “Alpha”  
   Combo Gage port (GP-3102NT)  
   Combo Gage Adaptor LMI (CA-860/LMI)  
   LMI Gage Adaptor (A-860-B/JS)  
   LMI 200-S or LMI 200-SB Probe  
   LMI 210 Master Block

1. Turn “ENDURA” On.
2. Open “Visual SPC”
3. Open “Visual SPC”
4. Select “File”, Select “New”
5. Select “Gage Document”, Select “OK” There is approximately a 10 second delay while the Endura reads the gage cable.
6. If gage name is not present, type in “LMI 200” and press “Enter”
7. The “GP Model” should be defined as “0800”
8. “Type” should say “User Defined Type”
9. Select “User Defined Type”
10. The “LMI/Torque Gage Download String Setup” will open
11. The “Names” box is highlighted. Press “Back”(on key pad), and key in the type of the measurement to be used, ie. “Probe”. **DO NOT PRESS ENTER.**

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12. The following parameters should be set:

- Modes = Force
- Direction: Forward \*(or Reverse)
- Starting Threshold: 0
- Stopping Threshold: 0
- Speed: 125 Hz
- Time Filter = 0
- Delta: 0
- Point: First
- Offset: Primary

\* The current configuration will produce negative reading when retracted beyond the nominal master position. To change the sign, change the direction to reverse.

13. Select "OK" and return to "Gage Sheet"

## **CALIBRATION/MASTERING**

1. Select "2. Master Values"
2. Select "Zero" and change to a Value of 9.5.
3. Leave "Secondary Zero" at "0.000000"
4. Select "2-Pt. MIN" and change to "9.5"
5. Select "2-Pt. Max" and change to a value of "19.5"
6. Select "3. Mastering"
7. Under "Mode", select "Master Fixture"
8. Proceed to do a 2 point calibration by selecting "Start" & place transducer in the tallest step of LMI 210 Master Block.
9. Place the transducer to the shortest step of LMI 210 Master Block and select "Stop"
10. If a message that "Slope and Offset are over the preset limit", Select "OK". Then select "OK" for Mastering was successful"
11. Under "Mode:" select "Zero Fixture"
12. Place transducer in middle step of LMI 210 Master Block
13. Select 'Start" then "Stop"
14. If a message "Offset over the preset limit for Port (1)", Select "OK". Then select "OK" for "Mastering was successful"
15. Select "File", then select "Save as". Give the file a specific name. Select "OK"
16. The LMI 200 Series transducer is now calibrated and mastered, ready for Data Collection
17. To Verify Zero: Select "Gage Sheet", Select "User Defined Type". Place the gage into the desired master position. Select the correct name ( ie. Probe). Select "Test". The reading will appear in the Test Reading Box located directly above the Test Icon.