

LINEAR MEASUREMENT INSTRUMENTS, Corp.

Research, Development and Manufacturing of Precision Measuring Systems

Configuration and Mastering Instruction for the LMI 200-S or LMI 200-SB to the LMI 440 or ASI DataMyte 501



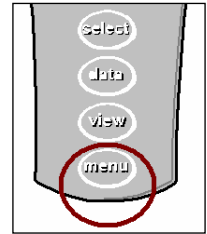
This process will outline:

<u>Section</u>		<u>Pages</u>
I.	Configuration of the LMI 440 or ASI DataMyte 501	2-4
II.	Mastering the LMI 200-S or 200-SB	5-6
III.	How to verify the mastering of the LMI 200-S or 200-SB	7

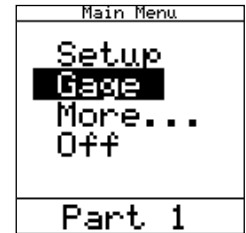
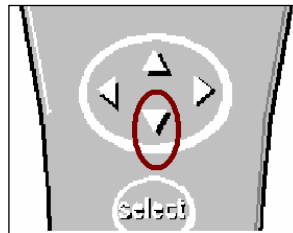
I. GAGE CONFIGURATION

Section I is a one time setup. After a successful gage configuration is finished there should be no need to repeat section I. It is recommended to store a copy of the gage files onto a personal computer or laptop. Consult the collector manual or if purchased the TranSend manual for further details.

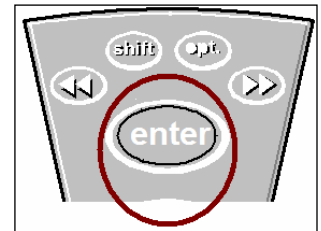
1. Press <menu> to turn on the collector.



2. Press ▼ to highlight “Gage”.

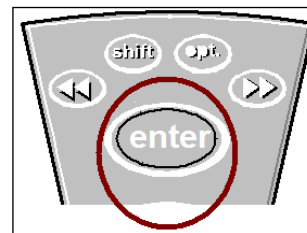
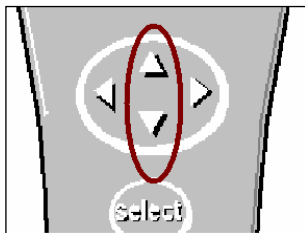


3. Press <enter>.



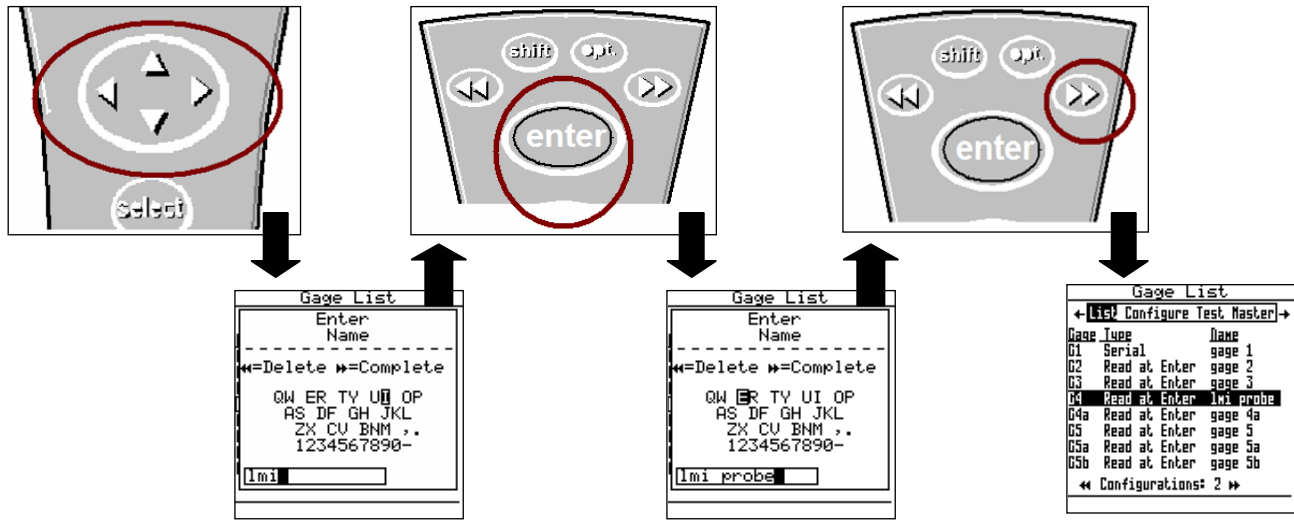
It is recommended to assign simple user name to the gage files such as; 200, probe, lmi probe, etc. This will help to identify different setups.

4. To assign a gage file name press the ▲ or ▼ to highlight gage “G4”* in the “Gage List”, and press <enter> on the collector. The alphanumeric screen will then appear.

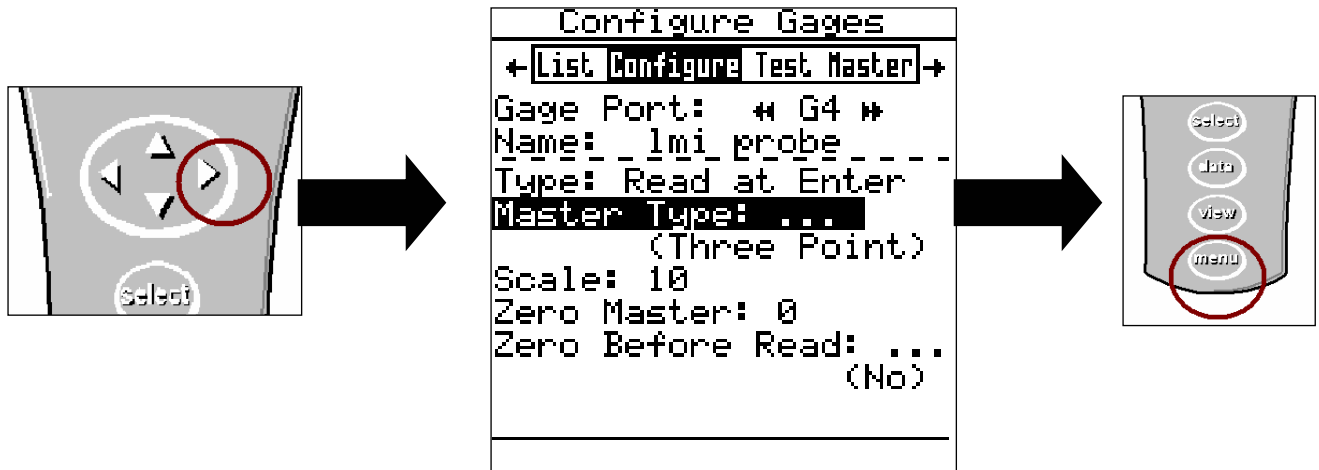


*G4 and G5 can both read the 200 series probes. The only rule to follow is the gage file must match the source code in part file, see collector manual for details. The balance of this instruction will be based on G4. To use G5, perform the following steps using the G5 gage file.

- Use the ▲, ►, ◀, or ▼ to highlight the desired character then press <enter>, repeat process until the gage file name is spelled out then press ►► to accept the new name.

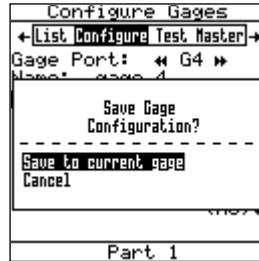


- Press the ► to “Configure”. By default the screen should read as follows. This screen determines how the collector will interpret the signal from the gage. Failure to set this screen properly may cause undesired results. If **no** changes to the screen are required, configuration is complete and press the <menu> key. If changes are required continue to step 7.



- If changes in this screen are needed, press the ▲ or ▼ to highlight the different selections then press <enter> to toggle through the choices of “Type”, “Master Type”, and “Zero Before Read”.
- To make changes to the “Scale” or “Zero Master” press ▲ or ▼ to highlight “Scale” or “Zero Master” and press <enter>. This will bring up the numeric keypad. Key in the new value and press ►► to accept.

9. Press the <menu> key to return to the “Main Menu”. If any changes were made in the “Gage Configuration” screen a save gage notification will appear. If the changes are intentional highlight “Save to current gage” and press <enter>. If changes are not intended, highlight “Cancel” and press <enter> and reset “Configure Gages” per step 6.



Gage configuration is complete.

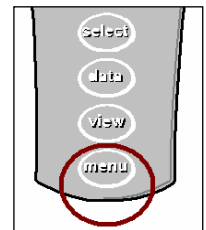
II. MASTERING INSTRUCTIONS

LMI suggests that this process be performed at the start of every shift.

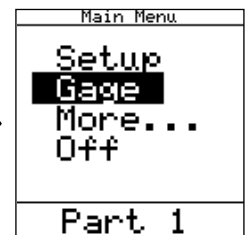
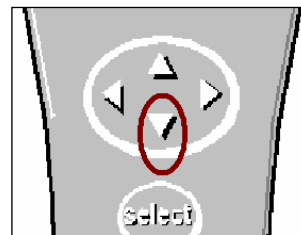
1. Connect the transducer to Gage Port 4 of the data collector. If G5 was selected in gage configuration use Gage Port 5.



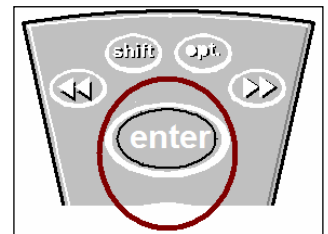
2. Press <Menu> to turn on the DATAMYTE 501.



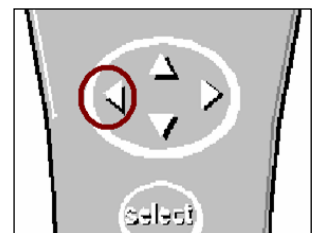
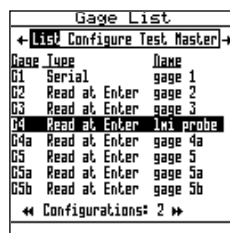
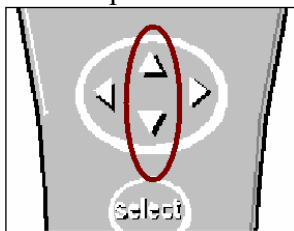
3. Press ▼ to highlight "Gage".



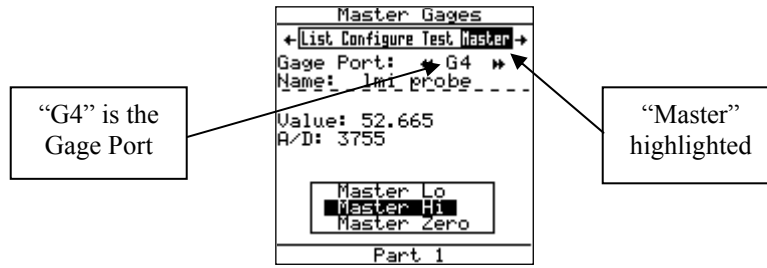
4. Press <enter>.



5. From the gage list use the ▲ or ▼ keys on the data collector to choose gage file G4, and press ◀ on the collector.



- 6 “Master” will be highlighted in screen header and “G4” is identified as “Gage Port”. If G4 is not the Gage Port press the ►► or ◀◀ until G4 appears.



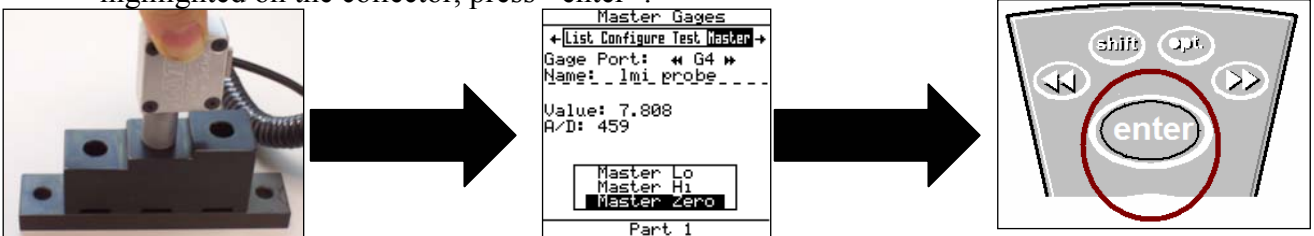
- 7 Place the transducer into the top or “Lo” step of LMI 210 Master Block. Verify “Master Lo” is highlighted on the collector, press <enter>.



- 8 Place the transducer into the bottom or “Hi” step of the LMI 210 Master Block. Verify “Master Hi” is highlighted on the collector, press <enter>.



- 9 Position the transducer into the calibration block’s center or Master. Verify “Master Zero” is highlighted on the collector, press <enter>.

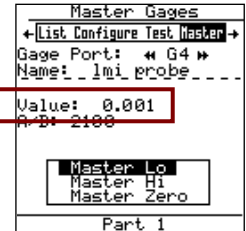
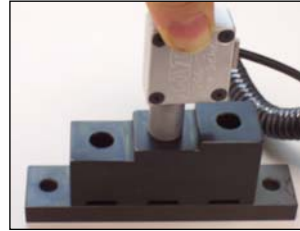


Calibration/ Mastering for the LMI 200 Series is now complete.

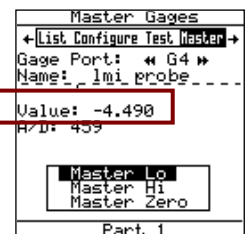
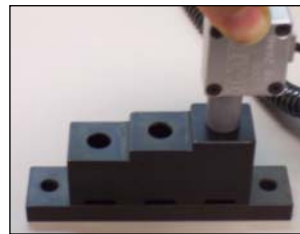
III. Verification of the Mastering

This process can be performed to verify the accuracy of the LMI 200-S or 200-SB after being mastered.

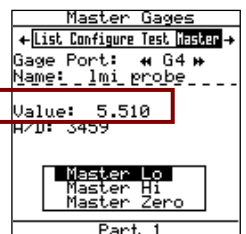
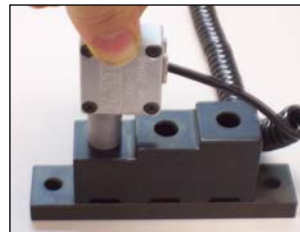
1. Insert the 200 into the “Master” position of the 210 block. The value on screen needs to read 0.00 +/- .03mm.



2. Insert the 200 into the “Lo” or top step of the 210 block and observe the value



3. Insert the 200 into the “Hi” or bottom step of the 210 block and observe the value.



4. Add the raw value of step 2 and 3 together, this example shows $4.49 + 5.51 = 10.00$. The sum of steps 2 and 3 needs to equal 10.00mm +/- .03.

If at any time the 0.00mm or 10.00mm span is not within +/- .03mm the 200-S or 200-SB needs to be remastered.

Verification is now complete, press <menu> to exit.