

## LINEAR MEASUREMENT INSTRUMENTS, Corp.

Research, Development and Manufacturing of Precision Measuring Systems

### Configuration and Mastering Instruction for the TP 102 or TP 103 to the LMI 440 or ASI DataMyte 501



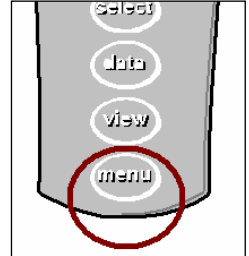
This process will outline:

<u>Section</u>	<u>Pages</u>
I. GAGE CONFIGURATION.....	2
II. MASTERING INSTRUCTIONS .....	5
III. INTERFACING & VERIFICATION of the INTERFACE.....	7

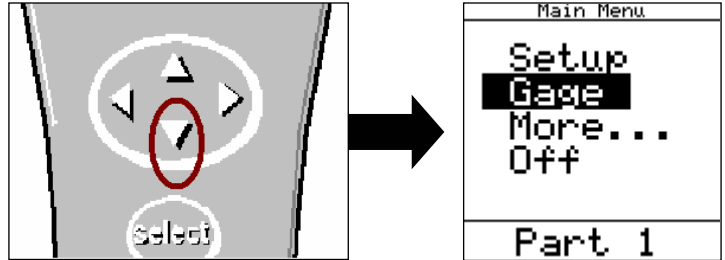
## I. GAGE CONFIGURATION

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.

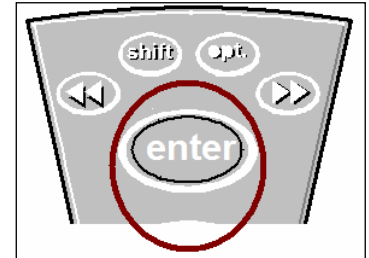
1. Press <menu> to turn on the collector.



2. Press ▼ to highlight “Gage”.

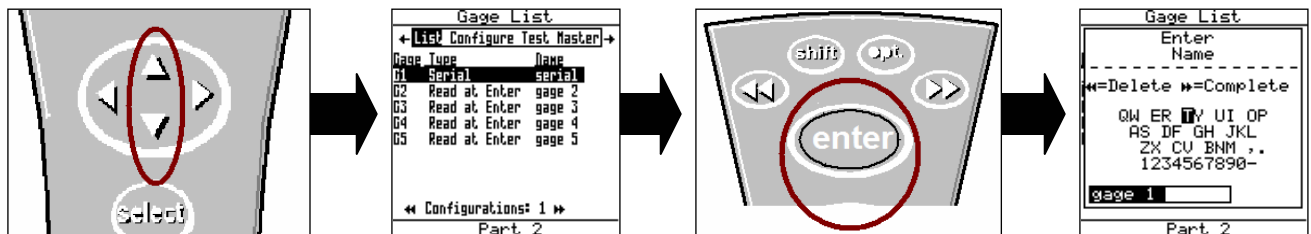


3. Press <enter>.

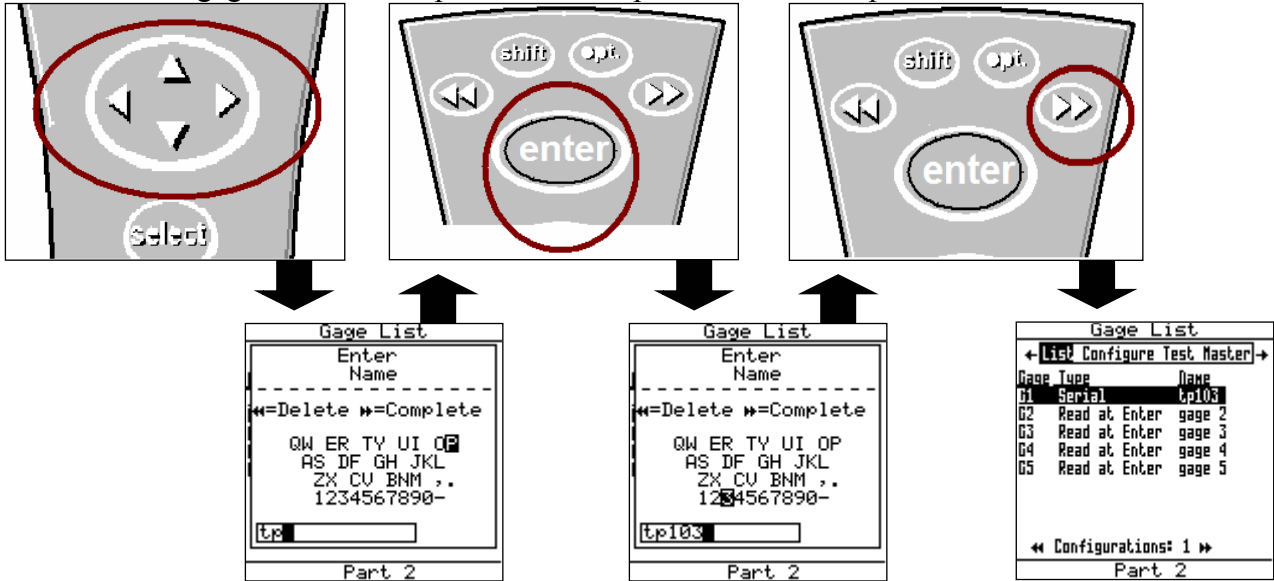


*It is recommended to assign simple user name to the gage files such as; TP probe, probe, lmi probe, etc. This will help to identify different setups.*

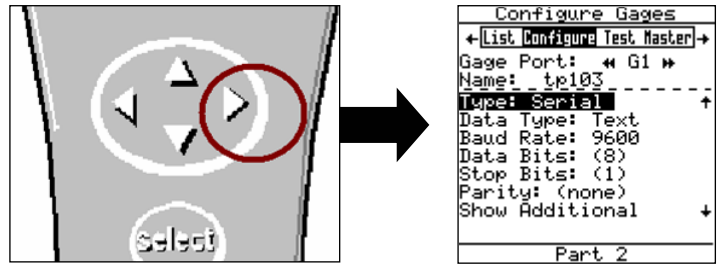
4. To assign a gage file name press the ▲ or ▼ to highlight gage “G1” in the “Gage List”, and press <enter> on the collector. The alphanumeric screen will then appear.



5. 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.



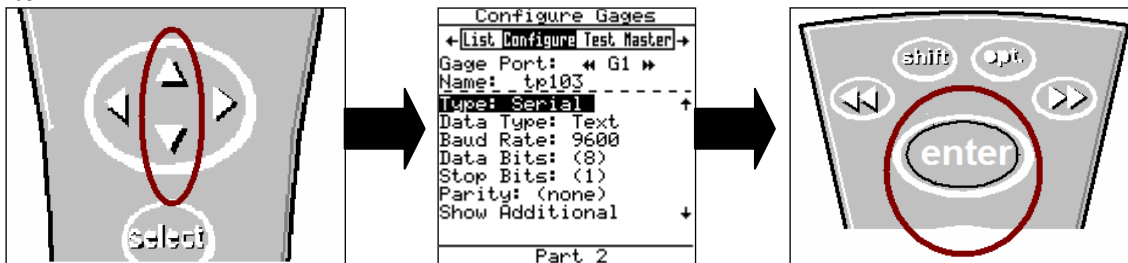
6. Press the ► to “Configure”. This screen determines how the collector will interpret the signal from the gage. Failure to set this screen properly may cause undesired results.



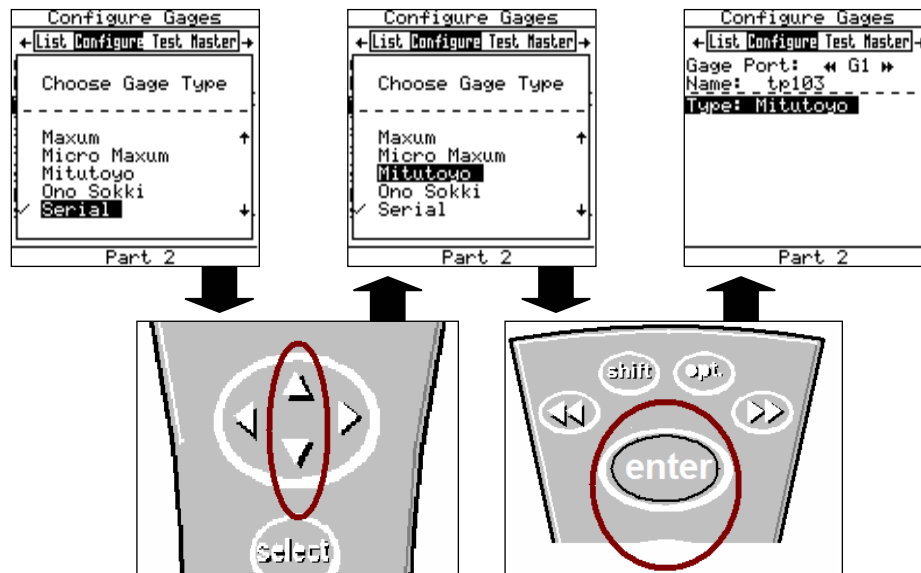
7. The “Configure Gages” screen needs to be set as follows. Failure to set this screen properly may cause undesired results.



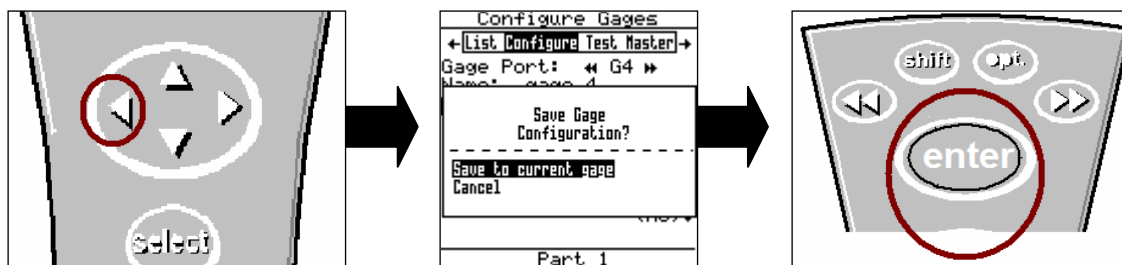
8. To change “Configure Gages” to “Mitutoyo” press ▲ or ▼ to highlight “Type” and press <enter>



9. The “Choose Gage Type” screen will appear, press ▲ or ▼ to highlight “Mitutoyo” and press <enter>.



10. Press ◀ on the keypad and a pop up will appear if any changes were made in the “Configure Gage” screen. If the changes were intentional, highlight “Save to current gage” and press



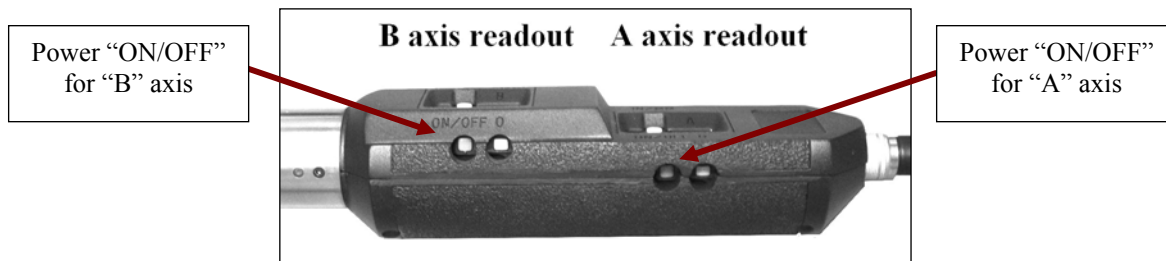
<enter>. If the changes were not intentional highlight “Cancel” to disregard the changes.

**Configuration Complete**

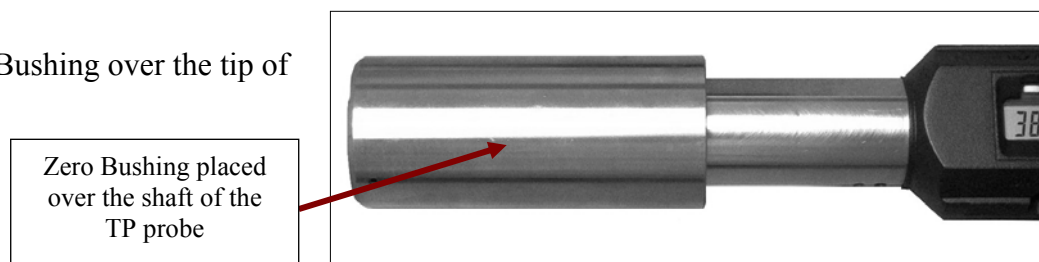
## II. MASTERING INSTRUCTIONS

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

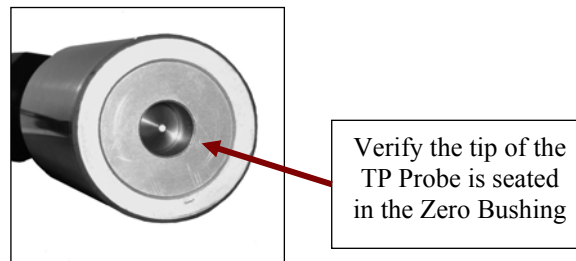
1. To turn on the display for the TP Probe, press the “ON/OFF” buttons for both the A and B axis readout.



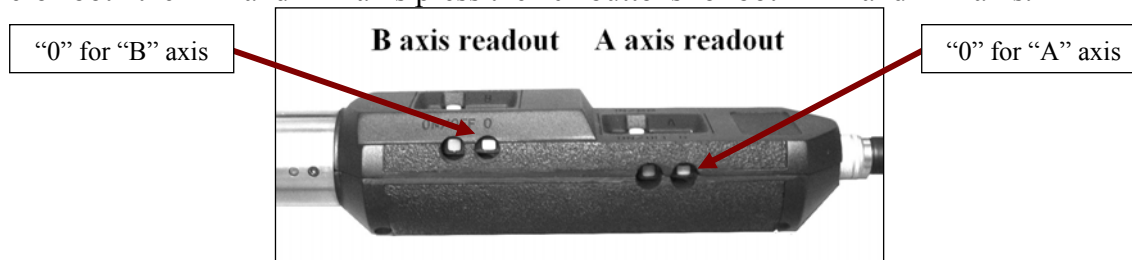
2. Place the Zero Bushing over the tip of the TP Probe.



3. Verify the tip of the probe is centered in the Zero Bushing.



4. “Zero” both the “A” and “B” axis press the “0” buttons for both “A” and “B” axis.



5. Both the “A” and “B” axis displays need to be 0.00 +/- 0.02mm.



- To alternate the display readout from Metric to English press the “IN/MM” button for both “A” and “B” axis readout.



*Mastering complete*

### III. INTERFACING & VERIFICATION of the INTERFACE

1. Connect the 91781 cable to port 1 on the collector.



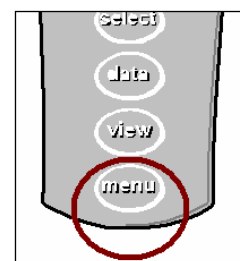
2. Connect the opposite end of the 91781 cable to the 10 pin mini round connector on the VT2163 interface.



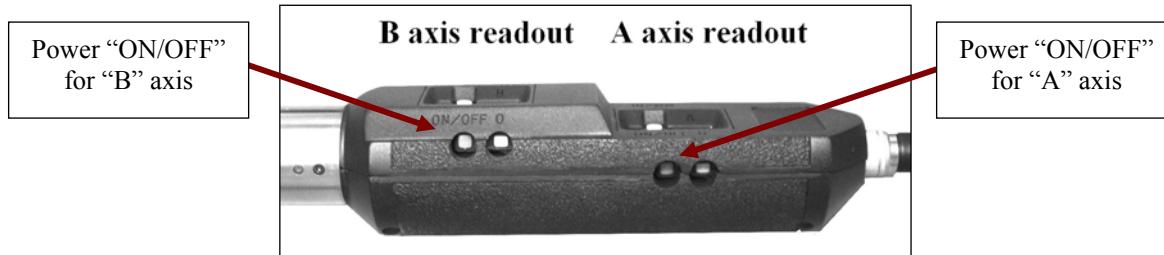
3. Connect the cable of the VT2163 interface to the 12 pin round connector on the TP102 or TP103



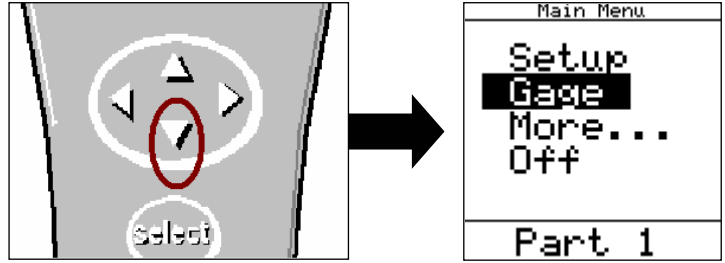
4. After the cables are connected, press <menu> to turn on the collector.



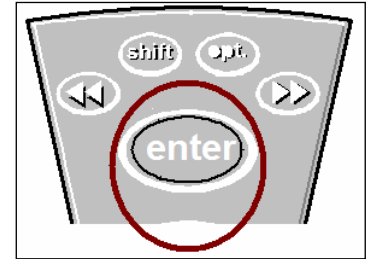
5. Turn both the "A" and "B" axis readouts on.



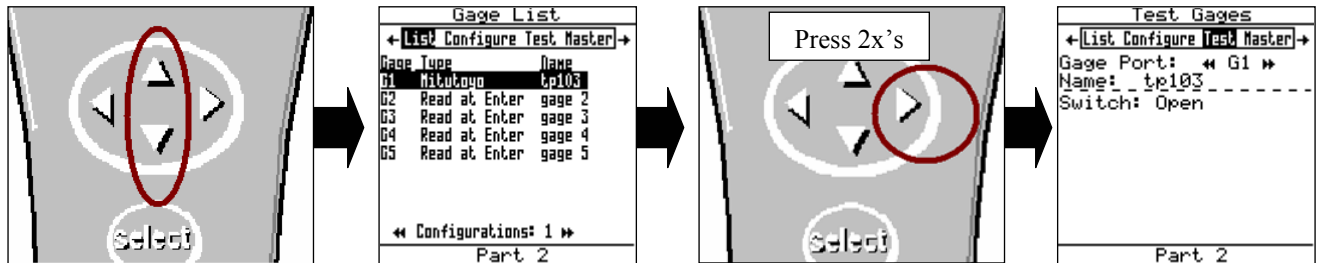
6. Press ▼ to highlight “Gage”.



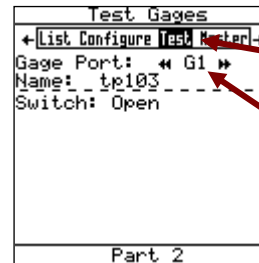
7. Press <enter>.



8. If needed press ▲ or ▼ on the collector to highlight “G1” then press ► twice to “Test”



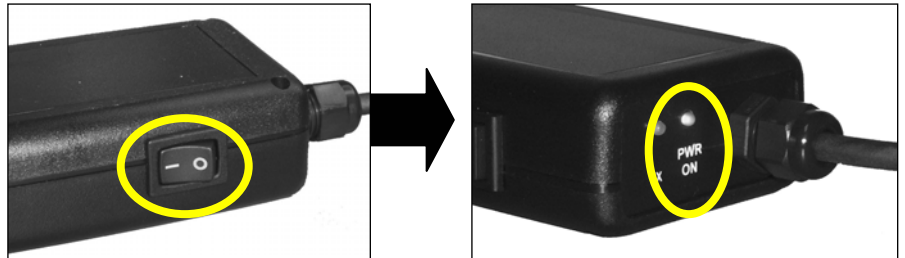
9. “Test” will be highlighted in the header and “G1” is the “Gage Port”. If “G1” is not the Gage Port, press ►► or ◀◀ until G1 appears.



Verify the screen is on “Test”.

Verify “Gage Port” is “G1”

10. Press the rocker switch on the VT2163 box so the minus sign is depressed. This will power on the transmitter as indicated by the “PWR ON” led.

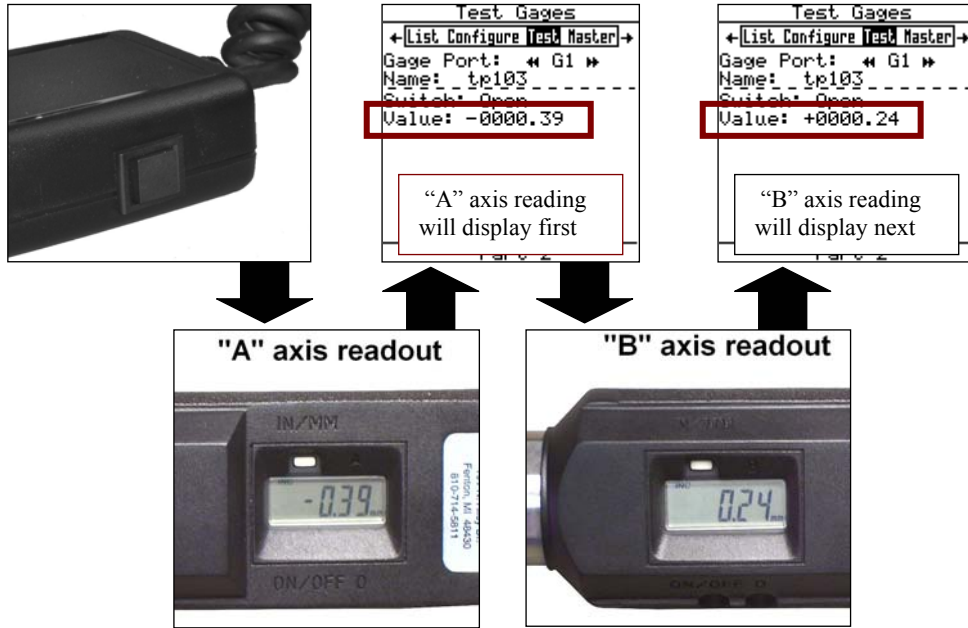




11. Move the tip of the TP probe and observe the readings.



12. Press the send button on the VT2163. In the "Test Gages" screen the collector will receive and display the "A" axis reading, then after 2-3 seconds the 440 will receive and display the "B" axis reading. The displayed readings on the collector need to be the displayed readings on the TP probe.



*Interfacing and verification of the interface complete*