

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

Research, Development and Manufacturing of Precision Measuring Systems

---

**INTERFACE INSTRUCTIONS FOR THE LMI 241-BWV2  
TO THE DATAMYTE 3053**

**REQUIRED EQUIPMENT FROM DATAMYTE:** DataMyte 3053

**REQUIRED EQUIPMENT FROM LMI:** LMI 241-BWV2 Flush and Gap Transducer  
LMI 6400 Interface to include:  
6025 6 pin to 6 pin cable  
(connects LMI 241-BWV2 to LMI 6023 switchbox)  
6023 Switchbox  
6024 6 pin to 15 HD connector  
(connect LMI 6023 switchbox to Datamyte)  
LMI 3030 Master Block  
Datamyte 3053

**SET UP FOR FLUSH CONDITION LMI 241-BWV2:**

1. Connect the LMI 241-BWV2 to the port labeled "2-4-1" on the LMI 6023 switchbox and connect the LMI 6024 to gage port 1 on the Datamyte 3053.
2. Select 'CAL A' on the slide switch of the LMI 6023 switchbox.
3. Toggle the rocker switch to '2-4-1' on the LMI 6023 switchbox
4. Turn on the Datamyte 3053.
5. Press the **▶** button on the Datamyte 3053 to highlight "Options".
6. Press the **▼** button on the Datamyte 3053 to highlight "Configure Gages", press <Enter>.
7. From the list displayed on the Datamyte 3053, use the **▲** and **▼** keys on the data collector to choose which gage designation to configure, (i.e., G1, G1A) and press <Enter>.
8. Using the keypad type a unique gage name, (i.e.: LMI-FLUSH) and press <Enter>.
9. Press the **▶** on the Datamyte 3053 to "Configure". Use the **▲** and **▼** to highlight the different selections. Use the <Enter> to toggle through the choices.
10. The "Configure" screen needs to be set as follows:
  - Type: Gap & Flush
  - Scale: 10mm(or.3937")
  - Zero Master: 0
  - Transducer: Low Level Gap Gage
  - Switch: (Read)
  - Master Type: (Three point)
  - Show Additional Parameters: (No)
11. Press the **▶** key. A "Save Gage Configuration" window will appear. Select "Save Current Gages" and press <Enter>.
12. Press the **▶** button to "Master".

# LMI Corporation

---

13. Fully extend the flush tip of the LMI 241-BWV2, highlight “Master Lo” on the Datamyte 3053 and press <Enter>.
14. Fully retract the flush tip of the LMI 241-BWV2, highlight “Master Hi” on the Datamyte 3053 and press <Enter>
15. Place the LMI 241-BWV2 into the LMI 3030 Flush master position, highlight “Master Zero” on the Datamyte 3053 and press <Enter>.
16. The Calibration/Mastering for FLUSH Condition is now complete.

## SET UP FOR GAP CONDITION:

1. Connect the LMI 241-BWV2 to the port labeled “2-4-1” on the LMI 6023 switchbox and connect the LMI 6024 to gage port 1 on the Datamyte 3053.
2. Select ‘CAL B’ on the slide switch of the LMI 6023 switchbox.
3. Toggle the rocker switch to ‘2-4-1’ on the LMI 6023 switchbox
4. Turn on the Datamyte 3053.
5. Press the **▶** button on the Datamyte 3053 to highlight “Options”.
6. Press the **▼** button on the Datamyte 3053 to highlight “Configure Gages”, press <Enter>.
7. From the list displayed on the Datamyte 3053, use the **▲** and **▼** keys on the data collector to choose which gage designation to configure, (i.e., G1A, G1B) and press <Enter>.
8. Using the keypad type a unique gage name, (i.e.: LMI-GAP) and press <Enter>.
9. Press the **▶** on the Datamyte 3053 to “Configure”. Use the **▲** and **▼** to highlight the different selections. Use the <Enter> to toggle through the choices.
10. The “Configure” screen needs to be set as follows:\*\*
  - Type: Gap & Flush
  - Scale: 10mm(or.3937”)
  - Zero Master: 3\*\*\*
  - Transducer: Low Level Gap Gage
  - Switch: (Read)
  - Master Type: (Three point)
  - Show Additional Parameters: (No)
11. Press the **▶** key. A “Save Gage Configuration” window will appear. Select “Save Current Gages” and press <Enter>.
12. Press the **▶** to button to “Master.
13. Fully retract the gap finger of the LMI 241-BWV2, highlight “Master Lo” on the Datamyte 3053 and press <Enter>.
14. Fully extend the gap finger of the LMI 241-BWV2, highlight “Master Hi” on the Datamyte 3053 and press <Enter>
15. Place the LMI 241-BWV2 into the LMI 3030 Gap master position, highlight “Master Zero” on the Datamyte 3053 and press <Enter>.
16. The Calibration/Mastering for GAP Condition is now complete.

## NOTES:

- \* This configuration will produce a negative reading when extended beyond the nominal. To reverse polarity, change the “Scale” to -10.
- \*\* This configuration will produce a positive reading when extended beyond the nominal. To reverse polarity, change the “Scale” to -10.
- \*\*\* This configuration will produce an actual reading. If a deviation from the nominal is desired, change the “Zero Master” to 0.