










MPMS100A Setup and Calibration



Setup

1. Connect TSD170 series transducer(s) to the channel port(s) on the side of the MPMS100A.
2. Connect the MPMS100A unit to mains power supply.
3. Connect the analog output cable between the Analog port on the MPMS100A and an available channel(s) on the UIM100C.
4. Turn MPMS100A power on.
 - Press and hold the power pad on the top panel
 - After approx. 3 seconds, display will read "stabilizing internal temperature"
 - Display will indicate that unit has detected the transducer(s)
 - Display will end on "ZERO BASELINE" screen.
5. Press the  down option to highlight "Channel 1" or "Channel 2" to zero.
6. Press  (check/1 pad) to display the numerical pressure reading.

Calibration

1. Press the  down option and scroll to select "Setup."
2. Press .
3. Scroll and press  again to set Frequency, Pressure Unit, and Mode.
 - a) Frequency: 5000 Hz is a good starting point.
 - b) Pressure Unit: typically mmHg for blood pressure *or* cmH₂O for airway pressure.
 - c) Mode: set to *Relative*; Absolute will return atmospheric reading.
4. Press  (return/3 pad) to return to the main menu.
5. Scroll to ANALOG CALIB. and press .
 - MIN and MAX will be displayed with corresponding values in mmHg and volts (COEFF. Is not used).
 - Transducers are factory calibrated and the appropriate units will display for each transducer.
6. Launch *AcqKnowledge* or *BSL PRO* software.
7. Generate the scaling dialog.
 - a) Choose MP menu > Set Up Channels.
 - b) Click Scaling for the channel the transducer is connected to.
8. Enter Scale Values to match the MPMS100A analog calibration display.
 - For example: Cal 1 Scale Value = -38, Cal 2 Scale Value = 263, Units = mmHg
9. Use the arrow pads to highlight the **MIN** value displayed on the MPMS100A Analog Calibration display and then click **Cal1** in *AcqKnowledge*/*BSL PRO*.
10. Use the arrow pads on the MPMS100A to highlight the **MAX** value on the Analog Calibration display and then click **Cal 2** in the *AcqKnowledge*/*BSL PRO*.
 - Cal1 and Cal2 Input Volts may vary slightly from the MPMS100A display; scale values will be the same.
11. Press  to return to the main menu.
12. Press  again to return to the main display with pressure readings.

