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Local Set Point Module Operating Bulletin

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INTRODUCTION: The Local Set Point Module (LSPM) is designed to provide a simple method to adjust and monitor the set point to your flow controller. It utilizes a convenient one turn twist knob, a versatile LED display, and a set point tracking alarm LED in a simple remote mountable package.

The LSPM reads the actual output signal, and can display the output parameter as well as the set point.



Flow Controller connected to the LSPM using the Top Connector Socket (this connection may also be made using the LSPM's Bottom Connector Socket)

CONNECTIONS: The LSPM requires a double ended DC-62 8 Pin Mini-DIN cable connected between <u>either the top or the bottom</u> connector socket of the LSPM and the connector socket on top of the controller. The two connector sockets on the LSPM are "pass through" connected so that the unused socket can be connected to a DC-61 single ended cable for connection of output signals and/or power. Appropriate power can be connected to either the LSPM or the controller, whichever is more convenient.

AC/DC Adapter Jack	
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Pin	Function	DC-61 (optional) Color Code
1	4-20mA Output Signal	Black
2	5.12 Vdc or Auxiliary Output	Brown
3	RS-232 Input Signal	Red
4	Set Point In	Orange
5	RS-232 Output Signal	Yellow
6	0-5 Vdc (or 0-10 Vdc) Output Signal	Green
7	Power In	Blue
8	Ground (common)	Purple

CAUTION: Do not connect power to pins 1 through 6 as permanent damage can occur!

Figure 1. Pin Out Diagram

OPERATION:

Display Mode Button: The LSPM display has several modes which are set via the Display Mode button. Pushing the button once will set the display menu cycle into operation. Pushing the button while the desired parameter is on the display will select that parameter. If the selected parameter has a sub menu, the sub menu will cycle until a menu item is selected by pushing the button while the sub menu item is on the display. Cycle rate is approximately 1 per second. The Display Mode menu is detailed below:



Display Mode Menu Diagram



Figure 2. LSPM Features

Tracking LED: The tracking LED is intended to alert the user whenever the actual process variable deviates from the set point by more than 2% of full scale. The tracking LED is always on whenever the LSPM has power and operates as follows:

Green	Process variable is within +/- 2% of Set Point
Red	Process variable is not within +/- 2% of Set Point

It is common for the LED to show red during a change in set point. Another common cause is when there is not sufficient pressure or flow for the controller to match the set point.

MOUNTING: The LSPM has four holes in the back cover to facilitate mounting to any suitable convenient flat surface. Remove the back cover by removing the four back cover retaining screws as shown in Figure 3 below. The holes in the back cover are sized to clear 4-40 threaded screws, but other appropriate screws may be used.



Figure 3. Removing the Back Cover for Mounting

To mount the LSPM, first mount the back cover with suitable screws, then re-assemble the LSPM with the four screws previously removed. A dimensional drawing of the back cover is also shown in Figure 4.



Figure 4. Back Cover Mounting Hole Pattern





