

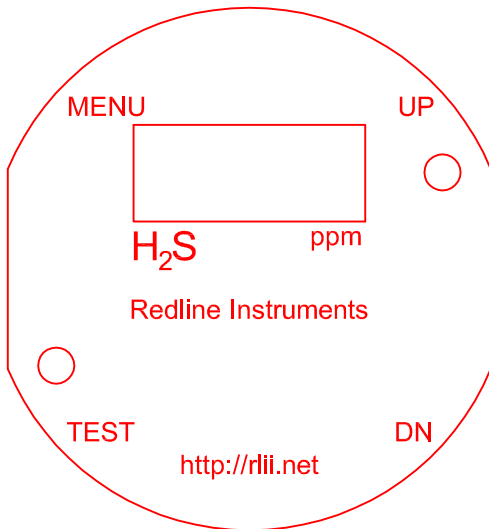
REDLINE INSTRUMENTS  
 RL802b 4–20mA Loop Transmitter  
 with Electrochemical Sensor

The RL802b is a 4–20mA output assembly. It uses an electrochemical sensor to measure the level of gas and converts the gas level into a 4–20mA output.

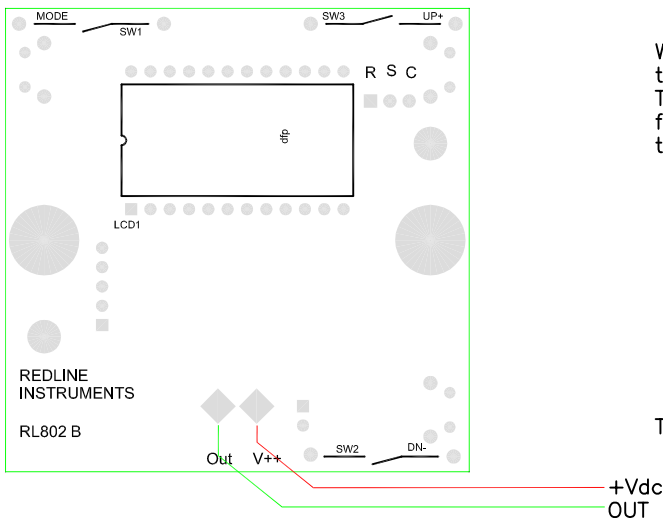
There are three pushbuttons on the RL802:

1. MENU in the upper left corner, used for setup.
  2. UP in the upper right corner, to increase a setting.
  3. DN in the lower right corner, to decrease a setting.
- (TEST has no functions on the RL802.)

The Menu, Up and DN functions may be activated by manually pressing the pushbuttons or by using a magnet for nonintrusive calibration.



Faceplate



Circuit Board

There are three menu steps:

1. Normal Operation  
 The system measures the level of H<sub>2</sub>S and outputs a current proportional to the level of gas.  
 4mA = 0ppm; 20mA = 100ppm.
2. NULL. Set the amplifiers to zero.  
 Press Menu for Null mode. "NUL" will flash in the display. Press DN to remove a background reading. The output is set to 3mA when in Null mode.
3. CAL. Calibrate the amplifiers.  
 Press Menu for Cal mode. "CAL" will flash in the display. Add calibration gas; use UP or DN to adjust the reading until it matches the cal gas value. The output is set to 2mA when in Cal mode.

Press Menu to return to Normal Operation.

When power is first applied, the system displays the type of gas it will sense, such as H<sub>2</sub>S. Then it shows the firmware revision, such as r 1.0, followed by a count up to 15 seconds, then goes to the Normal Operation.

The RL802b system is powered by a 12V–24Vdc input.