

TPS-TH36 Throttle Position Sensor



Mounting Specifications:

- 1. The sprung TPS lever should be pushing against the throttle shaft lever
- 2. Make sure that there are no obstructions by opening and closing the throttle. There should be no binding whatsoever.

Wiring

- 1. Connect the red wire to a 5V power supply. If you have an AuxBox, DL-32, or SSI-4 you may use the 5V output. *If have an LM-1 with either the AuxBox or the RPM converter please see optional power instructions.
- 2. The white wire signal wire to an available CH+ terminal.
- 3. The black ground wire to the ground used by the Innovate Motorsports data logger. From that common ground, run a separate wire to the CH- terminal of the channel being used.

Software Setup

- 1. In LM Programmer set the selected channel to External 0..5 (Fig. 1). You may also accomplish this by using the channel and function buttons on the DL-32 and AuxBox.
- 2. The next step is to acquire the output voltages of the sensor. This is done by measuring the voltage from the white wire with the throttle closed and again with the throttle wide open. You may do this with a volt meter or by setting up LogWorks to read a 0-5V signal (basically using the software as a volt meter).
- 3. Once you have the voltages acquired in step 2 open LogWorks. Go to Channels/ Configure Channel and select the channel which you have the sensor connected to. Change the **Input Mode** to "External 0..5 Volt." In the **Unit of Measure** box type in "%". Next, set your voltage values for 0% throttle in box **A** and 100% throttle in box **B**. (Fig. 2.)





*Optional Power Instructions

Customers running an LM-1 with either an AuxBox or the RPM converter will need a different means to feed 5V to the sensor. Your TPS kit contains both a resistor and a zener diode in order to drop the vehicles 12V power to 5V. Note: The AuxBox should not be powered by a separate 12V power source when connected to the LM-1, use the schematic below

- 1. 5.1 volt, .5 watt Zener Diode (directional)
- 2. 3.9k .25 watt resistor
- 3. Ground

