Corsa Instruments Inc. • 2370 Abbott Ave • Ann Arbor, MI 48103

# Linear Pot Sensor Installation and Calibration 

| Corsa part \#: | LP025, LP050, LP075, LP100, LP125, LP150, LP175, LP200, LP225, <br> LP250, LP275, LP300, LP325, LP350 |
| :--- | :--- |
| Nominal range: | XXXmm (Where XXX is the last three digits of the Corsa part <br> number) |
| Nominal scale: | (XXX/4096) mv/mm <br>  <br>  <br>  <br> (XXX/161.26) mv/in |

## Installation:

- Make sure the sensor is mounted so that it never comes against the internal stop, either in compression or extension. Over-travel is the most common way linear pots are damaged.
- Where possible, mount the sensor so the moving rod faces down or back, to reduce excess water from contacting the unit.
- It is best to mount the body of the sensor on the part that does not move, so the cable is not flexing when in motion.


## Hookup:

- Each Corsa DB9 cable is wired for 1 to 5 channels. The numbers are shown on the round connector on the sensor end. For example, if the number on the round connector is 2 , then when the sensor is connected to the Analog A input port, the channel number would be A2. You can use a junction box to connect up to 5 sensors to one input port, as long as all the sensors have different channel numbers..
- For most uses, use Analog Port A, B, or C with the linear pots. These ports have the appropriate lowpass filter for measuring body and suspension motion in most applications. Only use port D for linear pots if you are sampling the sensor 100 times a second or faster, as for shock speed measurement.


## Configuration:

In many cases the best procedure is to move the mechanism to two known points (for instance, two different ride heights) and read the sensor output. There is an example in the Corsa manual for doing this to measure steering position. Otherwise, you can enter the value shown at the top of this page, and the readout will be in inches.

