Corsa Instruments Inc. • 2370 Abbott Ave • Ann Arbor, MI 48103
(734) 761-1545 • toll-free (888) 201-7010 • Fax (734) 214-5886
e-mail: info@corsa-inst.com • http://www.corsa-inst.com

Linear Pot Sensor Installation and Calibration

Corsa part #: **LP4**
Label: **604R4k**
Nominal range: **4 inches**
Nominal scale: **1024 mv / inch**

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 water and dust getting into the unit.
- For extreme conditions (like dirt track cars) make a "boot" or sleeve to protect the sensor and the pushrod, similar to the dust boot on a shock absorber.
- 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 sensor is pre-wired for a given channel number. This number is written on the sensor body or on the DB9 connector. For example, if the number on the connector is 2, and the sensor is connected to the A input port, the channel number would be A2.

- 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.