



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>

String Pot Sensor Installation and Calibration

Corsa Part # : SP10
Label : LX-PA-10
Nominal Range : 10 inches
Nominal Scale : 361 mv / inch

Installation:

- **WARNING:** Do not allow the cable to snap back freely! This can result in damage to the sensor.
- This sensor works well for steering angle, throttle position and many other uses. In many cases, it works for suspension position as well.
- Installation is easy - just mount the sensor securely and fasten the cable to the moving part. It is best if the cable exits more or less straight from the sensor body. Use a cable tie to secure the electrical cable to the body of the sensor or to a bracket, so there is no strain on the terminals.
- Make sure that at the extreme of travel (full steering lock, full suspension droop, etc.) there is still a little bit of travel left in the sensor. If you pull the cable out hard against the stop, the sensor will be ruined.
- The sensor is not waterproof. If possible, mount it with the opening facing down or back so water and dust are less likely to be forced into the opening. Make a shield or enclosure if needed.
- Steering angle can be measured at the tie rod, or the cable can be fastened to the steering column so the cable winds around the steering shaft as the wheel is turned. This keeps the sensor inside the cockpit where it is less likely to be damaged.

Hookup:

Each Corsia 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.

Configuration:

In many cases, the best procedure is to move the mechanism to known points and read the sensor output. There is an example in the Corsia Manual for doing this using an SP10 for setting position. Otherwise, you can enter the value shown at the top of this page as the scale, and your readout will be in inches.