



**Dakota Alert, Inc.** [www.dakotaalert.com](http://www.dakotaalert.com)

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### **Hard Wired Vehicle Sensor Installation Instructions**

Thank you for purchasing the Hard Wired Vehicle Sensor. The vehicle sensor is used primarily as a driveway alarm to detect vehicles or other large metal (iron) objects. The probe of the vehicle sensor will detect the movement of a metal object and then activate the control box to sound a whistle. The probe is not affected by stationary metal objects such as fences and parked cars. The speed and size of the object are going to have an effect on the way the sensor detects. Generally, a car driving by at 10 to 15 MPH will be detected by the probe at a distance of about 10 to 12 feet. If a vehicle contains more metal or is driving faster, the sensor will detect it at a greater range. A small object like a bicycle will only be detected from a few feet.

The Hard Wired Vehicle Sensor consists of a control box, probe and wire. The control box will plug into an outlet and is equipped with an on/off switch to control the power. The probe is connected to the control box by a two conductor shielded direct burial wire. The wire will connect to the red and black terminal on the right side of the terminal strip. The red(+) and black(-) terminals on the left side of the terminal strip are a 12 volt DC(500mA max) output. This would be used to power loud bells, sirens, whistles, etc. The control box also has a whistle built in that will sound when the probe detects a vehicle.

The control box should be located in the house near an outlet and in a location where the whistle can be easily heard. The control box is plugged into an outlet and the wire from the probe is connected to the terminal strip. With the switch in the "on" position, it will take about 2 minutes for the vehicle sensor to warm up before it will detect a vehicle. This warm up time applies after any time the power is turned off.

The probe should be located as close to the driveway as possible to detect the vehicles. It is also advisable that the probe be located at least 80 feet from any main roads, so as to avoid signals from high speed traffic. It should also be at least 100 yards from train tracks. If your driveway is only one car wide, the probe will work well buried alongside the drive. If the drive is two cars wide, it will be best to have the probe buried in the middle of the drive. If the probe is buried in the middle, it is best to have the probe at least one foot deep and in a conduit of a schedule 80 PVC pipe. This will protect the probe and wire from any damage caused by heavy vehicles. The wire should then be buried to the control box in the house. If the wire is buried in a low traffic area, it could be buried directly in the ground. If the wire will be going through an area of vehicle traffic, it is best to run the wire in a conduit. If any damage occurs to the wire, false signals will result. If you need to splice the wire, make sure that it is a water tight splice. If the wire is above ground in any location it should be placed in a conduit. This will prevent damage from rabbits or other rodents chewing on the insulation.

Inside the control box you will find the circuit board of the sensor. At the bottom of the circuit board is the sensitivity control. For most applications the sensitivity should be set about straight up at 12 O'clock. To increase sensitivity turn the knob clockwise up to about 5 O'clock max. Do not have the sensitivity all the way to maximum or minimum as false alarms or failure to perform may occur.

**WARRANTY:** Dakota Alert warrants this product to be free of defects in material and workmanship for a period of one year from the date of purchase. This warranty does not cover damage resulting from accident, abuse, act of God or improper operation. If this product does become defective, simply return it to Dakota Alert. Please include a note describing the troubles along with your name and return address as well as the original sales receipt. If the product is covered under warranty it will be repaired or replaced at no charge. If it is not covered by warranty, you will be notified of any charges before work is done.