DSP-22 Vehicle Detector
All this and a 5-Year Warranty too!

Overview
The DSP-22S detector will add a new dimension of simplicity to your plug-in detector requirements. This series of Diablo's detectors are covered by United States patent number US 7,132,959 "Non-Interfering Vehicle Detection." These detectors are virtually cross-talk free in most applications. This micro-sized detector will automatically adjust its sensitivity level when used on different sized loops. The detector loop inductance should be between 20 and 2000 microhenries.

LED Indicators
The green Power LED will be on steady to indicate the detector is operating and powered. The red Detect LED will turn on when a vehicle is over the loop detection area.

Detect Memory
Power interruptions of short duration are ignored. If power fails for approximately 1 ½ seconds or less the detector "remembers" a vehicle.

Sensitivity and Reset Push Button
The Reset/Sens. button is used for two functions. A short press and release of the button will reset the detector and the LED's will both flash from 1 to 4 times, indicating the detector's sensitivity level. The detector is shipped from the factory with the sensitivity set at level 3.

If a different sensitivity level is required:
Push and continue to hold the button until the LED's start flashing - release the button immediately after the desired number of flashes. For example, if the sensitivity is to be changed to level 2, push and hold the button until the LED's flash twice then immediately release the button. The sensitivity level can always be verified by a quick tap on the push button. This will reset the detector and flash the two LED's indicating the present level.

Level 1 - Very Low
Level 2 - Low
Level 3 - Normal (Factory setting)
Level 4 - High

Loop or Wire Failures
In the case of a loop circuit failure, the green LED flashes slowly (twice per second) for an open loop circuit failure. The green LED will flash fast (10 times per second) to indicate a shorted loop circuit.

Fail Safe vs Fail Secure
A fail safe detector will output "detect" when the loop circuit is failed. This is always useful on a safety loop. On the free exit loop this will keep the gate open until the situation is fixed. This is useful in applications where it is important to allow traffic flow to continue. A fail secure detector will never output "detect" when the loop circuit is failed. This will keep the gate closed. This is useful in high-security areas or installations where containment is needed. The DSP-11 is a fail safe detector. **Note:** Never use a fail secure detector on a safety loop.

Features

- Works on any in-ground inductive loop from 20 to 2000 microhenries.

- Designed to be cross talk free between other loops

- Automatically compensates for loop and lead-In sizes

- Separate Power/Fail and Detect LED's for both channels

- Small profile, perfect for many installations

- Fail safe operation

- Operates on 12 VDC

- This series of Diablo Controls detectors are covered by United States patent. Patent number US 7,132,959 "Non-Interfering Vehicle Detection."

- Available in single and dual channel models. Matches DKS® 9410-10 single channel or DKS® 9409-10 dual-channel detector

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DSP-22 Vehicle Detector

Outputs
Solid-state (open transistor collector) for Channel 1 detect and a SPDT 1 amp relay output for Channel 2.

Power
12 to 30 volts DC

Operating Temperature
-35°F to 165°F (-37°C to 74°C)

Size
Height: 4.4"   Width: 3.0"   Depth: 0.8"

J1 Connector
3-position male for mating with the gate operator PCB.
Pin 1 – Power in 12 to 30 volts DC
Pin 2 – Common
Pin 3 – Channel 1 solid state output (Connects to common for detect)

J2 Connector
7-position terminal block for external connections

1 - Loop input for detector #1
2 - Loop input for detector #1
3 - Loop input for detector #2
4 - Loop input for detector #2
5 - Channel 2 relay N.O. (Closes for detect)
6 - Channel 2 relay common
7 - Channel 2 relay NC. (Opens for detect)

Ordering Information
Standard part numbers are as follows:
DSP-22-x
        x = 1 = Single channel model
        x = 2 = Dual channel model

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Visit our Website at www.diablocontrols.com for the most current information on all of our products.
Specifications are subject to change.
DSP-22_CUT_A   2/5/2014