

DSP-7LP Vehicle Detector

Ultra Low Power Solar Friendly Plug and Play "Micro" Detector

OPERATION

The DSP-7LP vehicle detector has been specifically designed for solar powered gate applications specifically for "fail safe" operations, such as on safety loops. This detector will operate on any voltage from **10 to 30 Volts AC or DC** and draws approximately 1 milliampere while waiting for a car. The power LED winks continuously once per second to indicate the detector is operating in the low power mode. The DSP-7LP detector has many of the same features as our standard DSP-7 but beats all competition for reliability, simplicity, and "no car" current consumption.

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.

Working on battery-powered and other parking and access control loop applications, the DSP-7LP is preset to the normal sensitivity level used in parking/access control applications, and tunes itself to the best operating frequency.

This micro-sized detector will automatically adjust its sensitivity level when used on different sized loops. Environmental conditions are constantly compensated with the DSP-7LP's *HYPERTRACK* software.

FEATURES

Loop Size - Works on any in-ground inductive loop from 20 to 1200 μ H.

Indicators - Separate Power and Detect LED's. The green Power LED will wink continuously once per second under normal operation. The red Detect LED will turn on solid for a vehicle.

Sensitivity - Automatic - compensates for large loops and large lead-ins.

Output Ratings - Single output, 1 amp relay at 30 VDC
Resistive - The relay common, NO, and NC contacts are available.

Loop Failure - The green power indicator flashes twice



per second if the loop circuit is open and 10 times per second if the loop circuit is shorted. This detector operates in the fail safe mode and will output a "Detect" for either of these loop failure conditions. **This "Fail safe" detector should be used on "safety" loops.**

Power - 10 to 30 Volts AC or DC. Approximately 1 mA (no car and all loop sizes) and less than 25 mA with a car on the loop or while in a "Fail" condition

Size - Height: 1.52" Width: 2.9" Depth: 1.56"

Connector - Removable 7-pin terminal block. Pin assignments are shown below - from left to right:

- 1 - Relay (NC) (opens for detect)
- 2 - Relay Common
- 3 - Relay (NO) (closes for detect)
- 4 - Power Common
- 5 - Power in (10 to 30 Volts AC or +DC)
- 6 - Loop
- 7 - Loop

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



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