

# DSP-50 Vehicle Detector

The Only Detector You Will Ever Need!

## FEATURES

The DSP-50 vehicle detector has been specifically designed to handle all parking, drive-through and access control applications. This device will work when connected to an embedded street loop or, (with a switch setting) the device will operate with a Mini-Loop available from Diablo Controls.

The Diablo Controls Mini-Loop is a small "pipe shaped" device- approximately 5" by 3/4" and is designed to be buried in the ground to detect vehicles. Contact Diablo Controls for more information.

The DSP-50 can be used as either a safety loop or free exit loop detector. With the flexibility to be either "fail safe" or "fail secure," it is the most "user friendly" detector on the market today.

## FRONT PANEL SELECTABLE SWITCHES

### SENSITIVITY SWITCH

This detector has a 10 position rotary sensitivity switch. The unit is shipped in the "5" position which is the normal sensitivity level. Sensitivity can be adjusted up and down from this level to accommodate different street loops or "MiniLoops".

### FUNCTION SWITCHES

The detector has a 10 position Dip switch to incorporate the following detector functions.

#### **DIPSWITCHES 9 and 10**

Frequency - One of four operating frequencies can be selected by changing these two switches.

#### **DIPSWITCH 8**

OFF = Inductive Loop operation. ON = MiniLoop operation.

#### **DIPSWITCH 7**

OFF = Normal Presence. ON = Extended Presence.

#### **DIPSWITCH 6 and 5** (Effects output "B" only)

6 = OFF and 5 = OFF B outputs are normal presence outputs.

6 = OFF and 5 = ON B outputs "Entry" pulse.

6 = ON and 5 = OFF B outputs "Exit" pulse.

6 = ON and 5 = ON B outputs "Fail" condition.

#### **DIPSWITCH 4**

OFF = Normal sensitive.

ON = Sensitivity "Boost".

#### **DIPSWITCH 3**

OFF = Fail Safe operation.

ON = Fail Secure operation.

#### **DIPSWITCH 2 and 1**

2 = OFF and 1 = OFF A Output normal Presence.

2 = OFF and 1 = ON A Output = 2 seconds Delay.

2 = ON and 1 = OFF A Output = 2 seconds Extension.

2 = ON and 1 = ON A Output = 5 seconds Extension.



### **Indicators -**

Green LED solid ON is power OK. Fast blink = "Shorted" loop or MiniLoop - Slow blink = "Open" loop circuit.

Red LED's OFF = No Detect. ON = Detect. Slow blink = Timing Delay. Fast blink = Timing Extension.

**Outputs -** Three separate solid state (normally open collector) outputs - 30 Milliamps Maximum and 20Volts Maximum.

**Output pins -** (looking into the connector - Right to left.)

1 Loop or MiniLoop

2 Loop or MiniLoop

3 Power input "+"

4 N/C

5 N/C

6 Output B

7 Output B reversed

8 Output A

9 Power input "+"

10 Power (and logic) Common

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

**Power -** 10 to 30 Volts D.C. ( 30 Ma. Max at 12 Volts)

**Enclosure -** Impact resistant, high temperature plastic.

H - 2.375" (60.4 mm) W - 0.86" (22 mm) D - 2.25" (58mm)



*Stuck in traffic for over 30 years!*

**Phone: (866) 395-6677 (Toll Free)**  
**DSP50\_CUT\_a**

**Web Site: [www.diablocontrols.com](http://www.diablocontrols.com)**