

DSP-222 Dual Channel Vehicle Detector

The Only Vehicle Detector You Will Ever Need!

OVERVIEW

The DSP-222 vehicle detector has been specifically designed to handle all traffic applications.

Working on virtually any size loop, the DSP-222 tunes itself automatically to the best operating frequency within the selected range. HYPERTRACK software constantly compensates for the changing environmental conditions. The DSP-222's inherent noise filtering algorithms allow it to work reliably in any electrical situation.

With its easy to understand front panel switches and built-in flexibility the DSP-222 is the most "user friendly" detector on the market today.

FEATURES

Loop Size: Works on in-ground inductive loops from 50 to 750 μ H.

Fail Safe Operation: The main solid-state output is configured to output a call whenever the loop circuit has failed.

Indicators: Separate "Detect" and "Fault" LEDs for each channel.

Sensitivity: Seven sensitivity settings with sensitivity 0 indicating the channel is off.

Frequency: Automatically tunes within one of four operating ranges.

Main Detection Output: Factory set to be fail safe and can be programmed to output either presence or pulse.



Loop failure: If the loop fails, the fault indicator codes the failure. If the loop recovers, the fault indicator will turn off.

Min Presence: A minimum presence of 125 ms can be programmed by setting jumper J1 on the PC board. This feature ensures that all presence outputs (even on high-speed arterials) will be at least 125 ms.

External Reset: The entire detector may be externally reset by holding pin C on the edge connector low for 15 microseconds.



Stuck in traffic for over 30 years!

Phone: (866) 395-6677 (Toll Free Sales)
FAX: (510) 490-4111

Phone: (925) 837-1884 (Technical Help)
Web Site: www.diablocontrols.com

DSP-222 INSTRUCTIONS AND SPECIFICATIONS

Sensitivity: Almost all traffic control applications can be handled with sensitivity set at NORMAL (level 4). The sensitivity DIPSWITCHES (S1, S2, and S3) should rarely be moved from NORMAL. However, the Model 222 has seven sensitivity settings varying from a LOW of level 1 to a HIGH of level 7. Sensitivity 0 will disable the channel.

Sensitivity	S1	S2	S3	ΔL%	Response Time (ms)
0	Off	Off	Off	Off	Off
1	On	Off	Off	.64	0.5
2	Off	On	Off	.32	1
3	On	On	Off	.16	2
4	Off	Off	On	.08	4
5	On	Off	On	.04	8
6	Off	On	On	.02	18
7	On	On	On	.01	32

Pulse / Presence: With this switch turned on the main output will output a 125 ms pulse each time a vehicle enters the loop detection area. If the vehicle remains within the loop for two seconds, the detector will automatically retune, making itself ready for the next vehicle to arrive. If this switch is turned off the detector will output presence.

Frequency: One of four operating frequencies can be selected by using the front panel DIPSWITCHES: FREQ1 and FREQ2.

NOTE - Changing any DIPSWITCH setting automatically resets the detector, which cancels the call output.

Indicators:

The green FAULT LED shows the following status:

Normal	On
Loop open	1 flash/second
Loop shorted	2 flashes/second
Intermittent loop	3 flashes/second

The red DETECT LED shows the following status:

Call	On
No Call	Off

Output Ratings:

Solid-State – 50 mA maximum, 30 VDC maximum. All outputs are optically isolated.

Power: 24 VDC, 100 mA maximum

Dimensions: H – 4.5” (11.43 cm) W – 6.875” (17.46 cm) D – 1.12” (2.84 cm)

Connector: Standard 2 x 22 pin edge card connector with key slots located between B & C and M & N. Pin assignments are listed below:

A	DC (-) Common
B	DC (+) Power
C	Reset
D	Loop 1
E	Loop 1
F	Output 1 Collector
H	Output 1 Emitter
J	Loop 2
K	Loop 2
L	Chassis Ground
M	
N	
P	
R	
S	
T	
U	
V	
W	Output 2 Collector
X	Output 2 Emitter
Y	
Z	

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

Storage Temperature: -67°F to 185°F (-55°C to 85°C)

Humidity: 0 to 95% relative

Phone: (866) 395-6677 (Toll Free Sales)
FAX: (510) 490-4111

Phone: (925) 837-1884 (Technical Help)
Web Site: www.diablocontrols.com