

Single Channel Inductive Loop Vehicle Detector

PD124



The PD124 is a single channel microprocessor based detector designed specifically for parking and vehicle access control application. The PD124 has been designed using the most up-to-date technology in order to meet the requirements of common parking applications.

The primary function of the detector is to detect vehicle presence by means of an inductance change caused by the vehicle passing over a wire loop buried under the road surface.

The PD124 has minimum user configuration and there are no user selectable switches. As such it is a "plug and play" unit for basic applications.

PART NUMBERS

303FT0001 PD124 Nortech 12-24V AC/DC

FEATURES

Compact Size:

The compact aesthetically pleasing housing combined with all the industry requirements regarding features and functionality allows this detector to be incorporated into any new or existing vehicle detection system.

Ease of Use:

The detector has been designed for ease of installation and convenience. There are no user selectable switches that could be incorrectly set or adjusted.

Internally though, for installation, there are two jumpers to change sensitivity between low and high settings as well as an option to change the relay output between presence and pulse options. Using this feature, the output of the presence relay will be maintained for an indefinite period, thereby eliminating premature barrier/gate/door closure and possible vehicle damage.

Loop Isolation Protection:

The loop isolation transformer provides protection against lightning and transient damage and allows for operation with single point to ground sensor loops.

Outputs and Indications:

The PD120 provides visual output (LED) on the front of the enclosure and relay change-over contacts on the 11-pin connector on the rear of the unit.

The LED indicates that power has been applied to the unit, that a vehicle is present over the loop and if there is a fault on the loop.

APPLICATIONS

- Arming card readers & ticket dispensers
- Barrier/Gate/Door closing detector
- Barrier/Gate/Door opening (free exit)
- For vehicle counting systems

TECHNICAL DETAILS

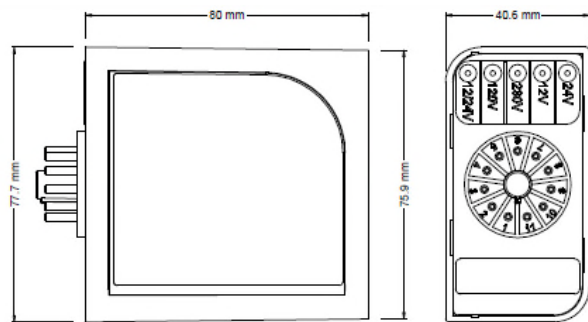
Self tuning range:	20-800 μ H
Sensitivity:	Two step adjustable on face-plate: High: 0.1% Δ L/L Low: 0.5% Δ L/L
Frequency:	Single frequency (determined by loop geometry)
Output	Configuration: Fail-safe: either presence or pulse
Pulse output duration:	Approx. 150ms Factory option 250ms
Presence time:	Permanent presence
Indications:	1 X Red LED Short Pulse to show power ON when in detect Fast flash for fault Slow flash for recovered from fault
Protection:	Loop isolation transformer, zener diode clamping on loop inputs and gas discharge tube protection
Power requirements:	12-24V AC/DC \pm 10% 1.5VA max @ 230V
Output Relay:	1A @ 230V AC

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Operating temperature range: -20°C to +70°C

Mechanical detail:

Material:	High heat ABS blend
Dimensions:	78(H) x 41(W) x 80(L)mm
Mounting:	Shelf or DIN-rail socket
Connector:	Single rear mount 11-pin submagnal (JEDEC No. B11-88)
Options:	1 metre flying lead 11 pin screw terminal Base



WIRING DETAILS

pin	designation
1	Live 12V-10% to 24V+10%
2	Neutral AC/DC
3	not used
4	not used
5	Presence Relay Normally Open contact
6	Presence Relay Common contact
7	Loop Twist this
8	Loop pair
9	Earth
10	Presence Relay Normally Closed contact
11	not used

OPTIONAL ITEMS

301FT0041	1 metre flying lead
CTR 119090	11 pin Relay Base

