

AUTOMATION SYSTEMS AND SOLUTION



Model – LD100 Series Single Channel Loop Detector

The LD100 is a single channel inductive loop detector designed for parking and access control applications.

Typical applications in the parking and access control environments are safety loops for barriers or gates, arming loops for activating card dispensers, entry or exit loops and vehicle counting.

Features:

Reset Switch. Pressing the reset switch enables the detector to be manually reset during commissioning and testing.

Switch selectable Sensitivity. The detect sensitivity is the minimum change in inductance required to produce a detect output. ($\%\Delta L/L$). Eight sensitivity settings are available on the switches to allow flexibility in configuration.

Sensitivity Boost. This feature sets the undetected level to maximum sensitivity and is used to prevent loss of detection of high-bed vehicles.

Filter Option. This option is used to provide a delay of 2 Seconds between detection of the vehicle and switching of the output relay. This delay is normally used to prevent false detection of small or fast moving objects.

Permanent Presence. This feature ensures detection of the vehicle will be maintained when the vehicle is parked over the loop for extended periods.

Pulse Relay Selection. The Pulse relay may be configured to energise on detection of a vehicle or to energise when the vehicle leaves the loop.

Selectable Pulse Time. This feature sets the length of time that the pulse relay will be energised. 1 Second or 0.2 Second.

TECHNICAL SPECIFICATIONS

| Power supply | LD100 200 - 260VAC 50Hz 1.5VA LD101 100 - 120VAC 60Hz 1.5VA LD102 11 - 26VAC/DC 50/60Hz 95mA max. |
|-----------------------|---|
| Presence Relay Mode | Change over contact 0.5A/220VAC (Fail Safe – normally energized) |
| Pulse Relay Mode | Change over contact 0.5A/220VAC(Non Fail Safe–normally deenergized) |
| Response time | Approximately 120ms after vehicle enters loop. |
| Indicators | LED indicators show: Power, Detect state and Loop Fault. |
| Detector tuning range | 15 - 1500uH |
| Loop Frequency | Approx. 23 – 130KHz |
| Power Fail Memory | 20 Seconds |
| Protection | Loop isolation transformer with Zener diodes and gas discharge tube. |
| Connector | 11 Pin Connector on rear of unit. |
| Dimensions | 80mm (height) X 40mm (width) X 79mm (Depth excl. connector). |
| Operating Temperature | -40°C to +80°C |
| Storage Temperature | -40°C to +85°C |

- LD100 Series Single channel boxed detector
- LD140 Series Single channel boxed detector
- LD107, LD106 Single channel low power detector
- LD113, LD113B Series Single channel card detector
- LD116 Series Single channel vehicle loop detector
- LD120T Single channel loop detector with communications

