Single Channel Loop Detectors

Product Description

One of the most critical components of the whole vehicle access control system is the inductive loop detector. Nortech's detectors have been renowned for their reliability and durability for many years.

Single channel loop detectors are used to identify the presence of vehicles by means of an inductive loop buried under the road. These "single chip" microprocessor-based units benefit from a detect filter and frequency indicator and are suitable for parking control and motorised door or gate applications. All detectors are CE tested and approved.

A compact detector diagnostic unit is available for extracting data from new and existing sites.

Features

PD130 - Vehicle Detector

- Compact size & elegant styling
- Diagnostic capabilities
- Selectable permanent presence
- Loop isolation protection
- Loop frequency indication
- Automatic Sensitivity Boost (ASB)
- Detect filter

PD139 - Card Based Vehicle Detector

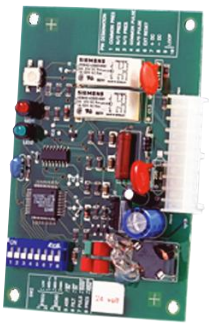
- Compact size
- Diagnostic capabilities
- Selectable permanent presence
- Loop isolation protection
- Loop frequency indication
- Automatic Sensitivity Boost (ASB)
- Selectable relay output configuration
- Loop fault monitor

DU100 - Detector Diagnostics Unit

- Compact, self-contained test
- Exclusive optical readout
- No service disruption
- Loop diagnosis
- Historical data available

Applications

- Parking barrier control
- Rising bollards
- Motorised gates and doors
- Industrial control systems
- Rising kerbs
- High-speed rapid roll industrial doors



PD139

DU100

Diagnostic Unit

Single Channel Loop Detectors

Technical Details

Face-plate LED Indicators:

Red - power,

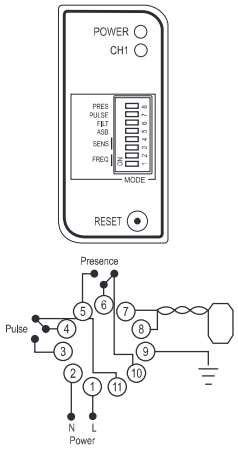
Green - channel indicator:

1. Tuning - on steady followed by flashing frequency count (x 10kHz)
2. Undetect - off
3. Detect - on steady
4. Fault - on with short off

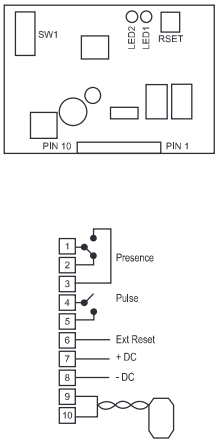
Operating Modes:

1. Limited presence/permanent presence
2. Pulse on detect/pulse on undetect
3. Automatic sensitivity boost off/on
4. Filter off/on (2 second delay)

PD130



PD139



Specifications

Self tuning range:	20-1500mH
Sensitivity:	4 step adjustable:
	High: 0.02% ΔL/L; Medium High: 0.05% ΔL/L; Medium Low: 0.1% ΔL/L; Low: 0.5% ΔL/L
Frequency:	4 step adjustable, 12-80kHz (frequency determined by loop geometry)
PD130 O/P relays:	Presence output relay - Change-over contacts (fail-safe) rated at 5A @ 230V AC
	Pulse output relay - Change-over contacts (non-fail-safe) rated at 5A @ 230V AC
PD139 O/P relay:	Presence output relay - Change-over contacts (fail-safe) rated at 1A @ 230V AC
	Pulse output relay - Change-over contacts (non-fail-safe) rated at 1A @ 230V AC
Pulse O/P duration:	PD130: Approx. 150ms, factory option 250ms
	PD139: Approx. 150ms
ASB:	Switch selectable automatic sensitivity boost
Presence time:	1 hour for 3% ΔL/L, permanent presence option

Protection:	Loop isolation transformer,
	zener diode clamping on loop inputs and gas discharge tube protection
PD130 Power reqt.:	120V AC +/- 15% 48-60Hz (PD131)
	230V AC +/- 15% 48-60Hz (PD132)
	12-24V AC/DC +/- 15% (PD134)
	Current: 1.5VA max @ 230V
PD139 Power reqt.:	24V AC/DC +/- 15%
	Current: 1.1VA max @ 24V DC
Operating temp:	-40°C to +80°C (circuit sealed against condensation)
Material:	PD130: High heat ABS blend
Dimensions (mm):	PD130: 76 x 40 x 78; PD139: 105 x 68
Mounting:	PD130: Shelf or DIN-rail socket; PD139: Panel or plug-in
Connector:	PD130: Single rear mount 11-pin submagnal (86CP11); PD139: Molex 10-pin female
Option:	Flying leads

Ordering Information

PD131:	Single channel, boxed, 120V AC
PD132;	Single channel, boxed, 230V AC
PD134:	Single channel, boxed, 12-24 V AC/DC
PD139:	Single channel, PCB, 24V DC
PD139-FAAC:	Single channel, PCB, designed to fit FAAC barrier controllers
DU100	Detector diagnostic unit

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