

## Dual Channel Vehicle 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 over many years.

Dual channel loop detectors are used to identify the presence of vehicles by means of two independent inductive loops buried under the road and can be used in almost any application.

Nortech's Dual channel detectors feature A-B logic and flexibility to eliminate cross-talk. All detectors are CE tested and approved. A compact detector diagnostic unit is available for extracting data from new and existing sites.



### Features

#### PD230 - Vehicle Detector

- ▶ Compact size & elegant styling
- ▶ Flexible
- ▶ Automatic Sensitivity Boost (ASB)
- ▶ A-B Logic
- ▶ Fault monitor
- ▶ Diagnostic capabilities

#### PD239 - Card Based Vehicle Detector

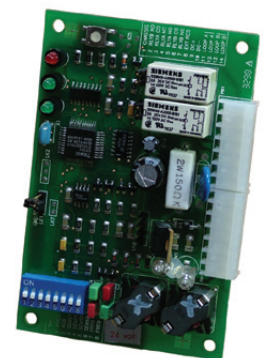
- ▶ Compact size
- ▶ Diagnostic capabilities
- ▶ Selectable permanent presence
- ▶ Loop isolation protection
- ▶ Loop frequency indication
- ▶ Automatic Sensitivity Boost (ASB)
- ▶ Selectable relay output configuration
- ▶ Loop fault monitor

#### 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

**PD239**

**DU100  
Diagnostic Unit**


## Dual Channel Vehicle Detectors

### Technical Details

#### Face-plate LED Indicators:

Single power LED plus individual channel LED's:

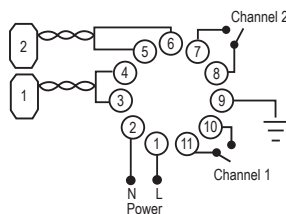
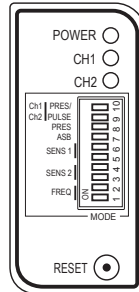
1. Tuning - on (flashed) or flashes alternatively in A/B logic mode
2. Undetect - off
3. Detect - on steady
4. Fault - on with short pulse

(manual reset required to restore)

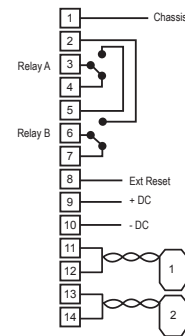
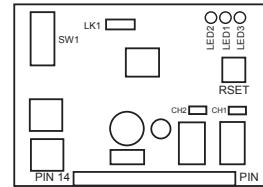
#### Operating Modes:

1. Presence (CH1) or Pulse (CH1)
2. Presence (CH2) or Pulse (CH2)
3. A to B (CH1) & B to A (CH2), (presence or pulse)
4. Automatic sensitivity boost off/on

PD230



PD239



### Specifications

<b>PD230</b>	Operating temp:	-40°C to +80°C (circuit sealed against condensation)
Self-tuning range: 20-1000µH	Material:	High heat ABS blend
Sensitivity: 4-step selectable per channel: High: 0.02% ΔL/L; Medium High: 0.05% ΔL/L; Medium Low: 0.1% ΔL/L; Low: 0.5% ΔL/L	Dimensions (mm):	76 x 40 x 78
Frequency: 4-step adjustable, 20-70kHz (frequency determined by loop geometry)	Mounting:	Shelf or DIN rail socket
Output relays: 1 output relay per channel (fail-safe) Fail secure (factory option)	Connector:	Single rear-mount 11-pin submagnal (86CP11)
ASB: Switch selectable automatic sensitivity boost	Option:	1 metre flying lead
Pulse O/P duration: Approx. 150ms (factory option 250ms)	<b>PD239</b>	As PD230 except for:
Presence time: Selectable: limited or permanent Limited: presence 1 hour for 3% ΔL/L	Self-tuning range:	20-1500µH
Protection: Loop isolation transformer, zener diode clamping on loop inputs and gas discharge tube protection	Pulse O/P duration:	Approx. 150ms
Power reqt.: 120V AC +/- 15% 48-60Hz (PD231) 230V AC +/- 15% 48-60Hz (PD232) 12-24V AC/DC +/- 15% (PD234) Current: 1.5VA max @ 230V	Presence time:	1 hour for 3% ΔL/L permanent presence option
Output relays: 5A @ 230V AC; N/O contact per channel (fail-safe)	Power reqt.:	24V AC/DC +/- 15% Current: 1.1VA max @ 24V DC
	Output relay:	1A @ 230V AC; change-over contacts
	Dimensions (mm):	105 x 68
	Mounting:	Panel or plug-in
	Connector:	Molex 14-pin female
	Option:	Flying lead

### Ordering Information

<b>PD231:</b>	Dual channel, 110V AC	<b>PD239:</b>	Card based dual channel, 24V DC
<b>PD232:</b>	Dual channel, 230V AC	<b>DU100:</b>	Detector diagnostic unit
<b>PD234:</b>	Dual channel, 12-24 V AC/DC		