

## 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.



PD230

### FEATURES

#### PD230- Vehicle Detector

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

#### PD239 - Card Based Vehicle Detector

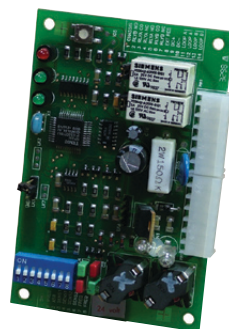
- Compact size
- Diagnostic capabilities
- Selectable permanent presence
- Loop isolation protection
- Loop frequency indication
- Automatic Sensitivity Boost (ASB)
- Selectable relay output configuration
- Loop fault monitor

#### DU100 - Detector Diagnostics Unit

- Compact, self-contained test
- Exclusive optical read-out
- No service disruption
- Loop diagnosis
- Historical data available
- Unique crosstalk monitor

### APPLICATIONS

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



PD239



DU100

# Dual Channel Vehicle Detectors

## Technical Details

### Face-plate LED Indicators:

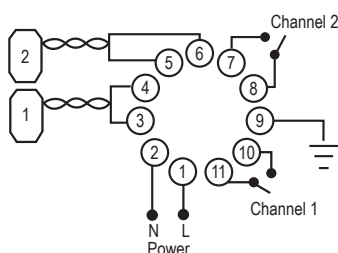
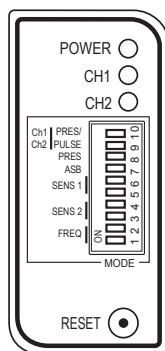
Single power LED plus individual channel LED's:

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)

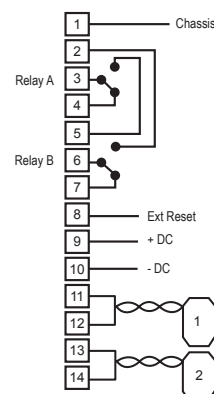
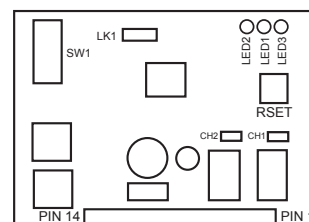
### Operating Modes:

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

### PD230

Self-tuning range:	20-1000 $\mu$ H
Sensitivity:	4-step selectable per channel:
High:	0.02% $\Delta$ L/L
	Medium High: 0.05% $\Delta$ L/L
	Medium Low: 0.1% $\Delta$ L/L
	Low: 0.5% $\Delta$ L/L
Frequency:	4-step adjustable, 20-70kHz (frequency determined by loop geometry)
Output configuration:	1 output relays per channel (fail-safe) Fail secure (factory option)
Automatic Sensitivity Boost:	Switch selectable
Pulse output duration:	Approx. 150ms (factory option 250ms)
Presence time:	Selectable: limited or permanent Limited: presence 1 hour for 3% $\Delta$ L/L
Protection:	Loop isolation transformer, zener diode clamping on loop inputs and gas discharge tube protection
Power requirements:	120V AC +/- 15% 48-60Hz (PD231) 230V AC +/- 15% 48-60Hz (PD232) 12-24V AC/DC +/- 15% (PD234)
Requirement:	1.5VA max @ 230V
Output relays:	5A @ 230V AC; N/O contact per

Operating temp range:	-40oC to +80oC
Material:	High heat ABS blend
Dimensions (mm):	76 x 40 x 78
Mounting:	Shelf or DIN rail socket
Connector:	Single rear-mount 11-pin submagnal (86CP11)
Option:	1 metre flying lead

### PD239

As PD230 except for:	
Self-tuning range:	20-1500 $\mu$ H
Pulse output duration:	Approx. 150ms
Presence time:	1 hour for 3% $\Delta$ L/L permanent presence option
Power requirements:	24V AC/DC +/- 15%
Requirement:	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

PD231:	Dual channel, 110V AC
PD232:	Dual channel, 230V AC
PD234:	Dual channel, 12-24 V AC/DC

PD239:	Card based dual channel, 24V DC
DU100:	Detector diagnostic unit