



# Single Channel Inductive Loop Vehicle Detector

# PD162 / PD164

The prestigious PD160 range provides a totally customizable inductive loop solution primarily suited to complex multilane access control.

The ease of installation of this product is not only cost effective but a pleasure to operate when determining the optimal parameters with the onboard diagnostics. Nortech is proud to introduce the ultimate parking detector, where sophistication is simplified.

#### **PART NUMBERS**

304FT1002 PD162D Nortech 240 VAC 304FT1004 PD164D Nortech 12-24V AC/DC

## **FEATURES**

## **Automatic Frequency selection:**

AFS: The Automatic Frequency Selection allows the best frequency setting to be automatically selected which minimises interference and maximise the loop signal strength.

# Diagnostic Capabilities:

Comprehensive built in diagnostics capabilities allow for accurate diagnosis of loop and installation problems. All the relevant information is displayed on the units LCD display.

The following parameters can be diagnosed: Frequency, Inductance Change, Noise / Interference and Signal Strength.

Channel counting information is also available.

#### Completely configurable:

The LCD menu provides customizable functionality in the choice of output variations, frequency and sensitivity settings. Any change in settings is saved in the event of a loss of power; however factory settings can be restored through the menu.

#### Selectable Permanent Presence:

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 Frequency Indication:**

The possibility of crosstalk (interference) between adjacent loops/detectors can be determined using the LCD display, and eliminated by changing the frequency settings

## **Automatic Sensitivity Boost (ASB):**

This feature facilitates the reliable detection of large truck-trailer combinations and high-bed vehicles by automatically boosting the sensitivity to maximum on detection of a vehicle.

## **Detect Filter:**

Provides an adjustable turn-on delay, thus allowing selective detection which is often useful for screening out unwanted inputs.

## **Powerfail Memory:**

In the event of a power failure, the PD160 detector will retain the presence of the vehicle when power is restored. This is most useful in applications where damage to vehicles could occur (e.g. Rising Bollards).

## **APPLICATIONS**

- Parking boom gate control
- Vehicle access control
- Motorised gates and doors
- Industrial control systems

Nortech Detection Pty Ltd

email: mail@nortechdetection.com.au web: www.nortechdetection.com.au

Tel: 02 8977 4047 Fax: 02 9475 4742

## **TECHNICAL DETAILS**

Self tuning

20-1500µH

range:

Sensitivity: Fifteen step adjustable on the LCD

menu

High:  $0.01\% \Delta L/L$  to

5% ΔL/L

Frequency: Eight step adjustable on LCD

menu, 12- 80kHz (frequency determined by switch setting and

loop geometry)

Filter Eight step selectable output filter: (Delay) Ranging from 100m.s. to 10 secs.

Output 2 output relays:

Configuration Relay 1 = Presence output

Relay 2 = Pulse output

Pulse output Pulse on arrival or departure configuration: Programmable pulse duration

Presence time: 1 hour for 1%  $\Delta$ L/L and permanent

presence option

Power Fail Selectable – infinite (refer to

Memory: user manual)

Indications: All diagnostic information is

accessible through the LCD menu Additional LED's provided for power

and channel status display

Protection: Loop isolation transformer, zener

diode clamping on loop inputs and

gas discharge tube protection

Power 240V AC ± 15% 48-60Hz (PD162)

requirements: 12-24V AC/DC ± 15% (PD164)

1.5VA max @ 230V

Output Relays: 1A @ 230V AC

Change-over contacts (fail-safe)

# PD162 / PD164

Operating temperature range: -40°C to +70°C

Mechanical detail:

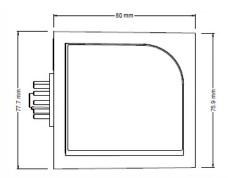
Material: High heat ABS blend
78(H) x 41(W) x 80(L)mm

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	230V AC 50/60 Hz OR
2	Neutral	12 - 24V AC/DC
3	Pulse Relay	Normally Open contact
4	Pulse Relay	Common contact
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 contact11 Pulse Relay Normally Closed contact

## **OPTIONAL ITEMS**

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



PD162 / PD164 PD162-PD164\_ds.pdf