

# Application Note

## PD232 / PD234 Detector Direction Logic Operation

In this mode the detector is used as a direction sensor and the primary task is to indicate the direction of travel over the loops. To achieve this two loops are placed in a manner to ensure that a vehicle passes over them in sequence  $A \Rightarrow B$  when travelling in one direction and in reverse order  $B \Rightarrow A$  when travelling in the opposite direction.

In this mode the CH1 relay provides an output when vehicles travel in the direction  $A \Rightarrow B$  and the CH2 relay provides an output when vehicles travel in the direction  $B \Rightarrow A$ .

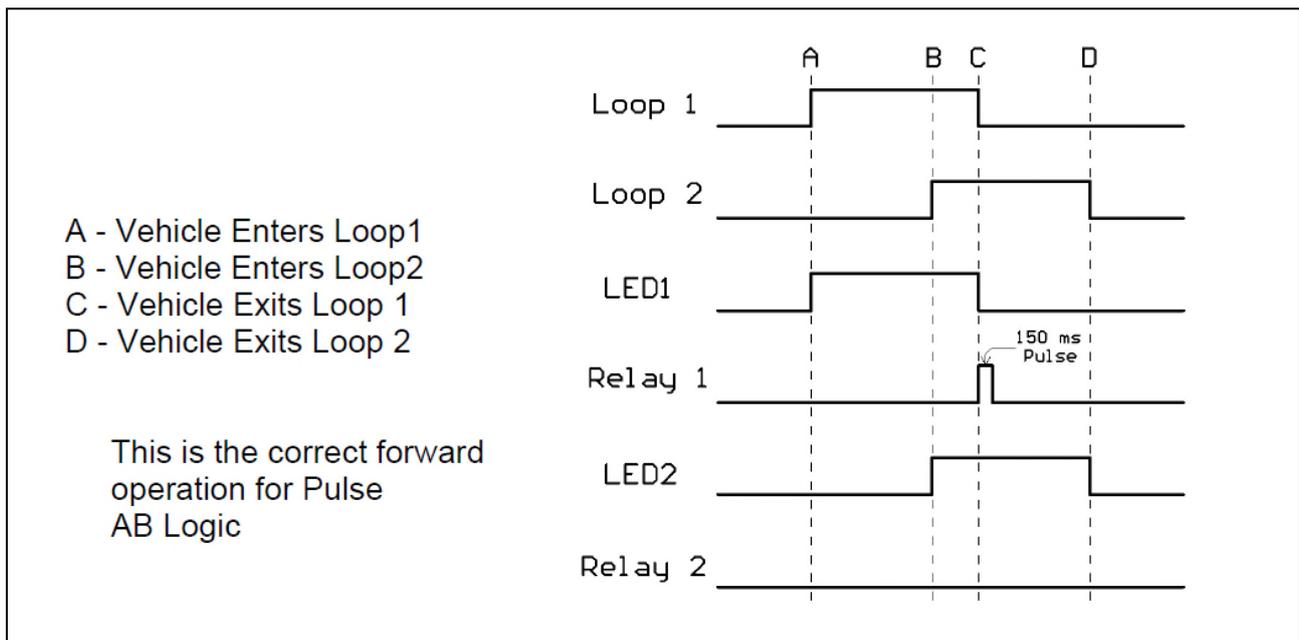
The “direction” output may be a “presence” or “pulse” output.

The presence output is available from the time that the vehicle reaches the front edge of the second loop in the direction of travel until the vehicle vacates the second loop.

The pulse output occurs at the time the vehicle departs the first loop in the direction of travel having occupied both loops in the correct sequence. If the vehicle backs out while still over the second loop a further pulse is issued on the relay for the other direction, maintaining count accuracy.

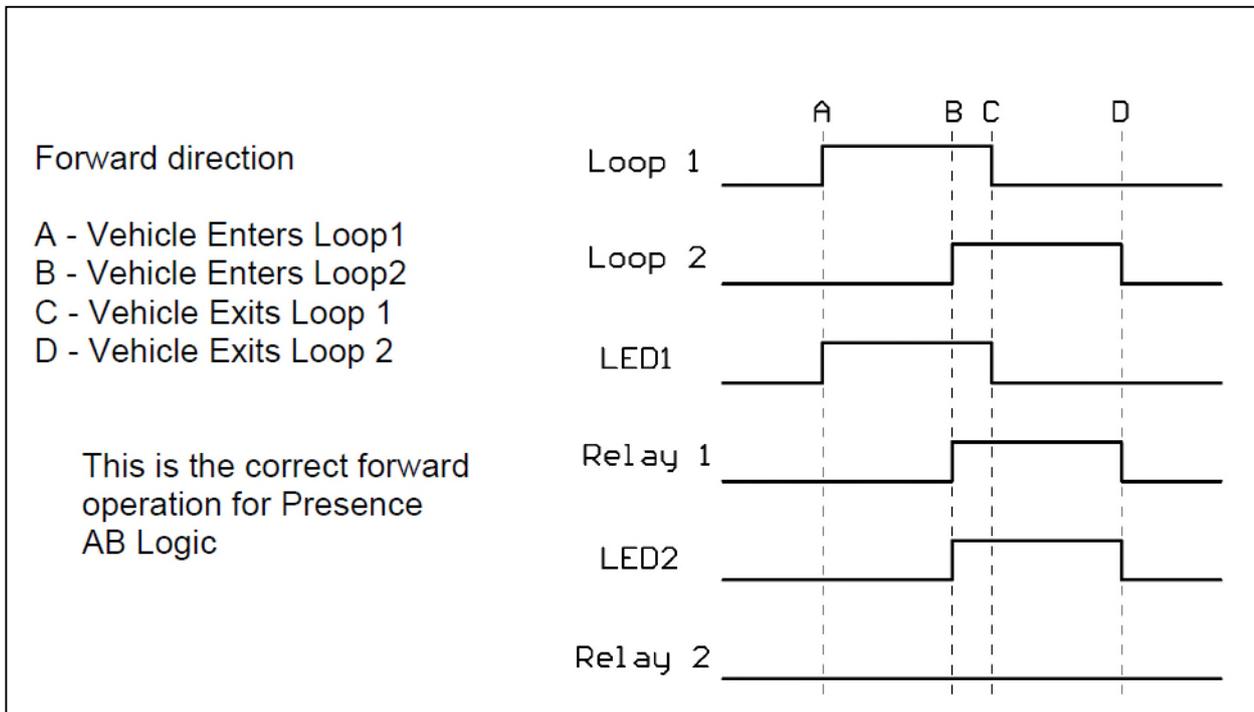
**Note that for correct operation of the direction logic, the space between the loops must be less than the length of the shortest vehicle to be detected. The minimum distance separating the loops should be 1 metre if the vehicle speed will be greater than 15km/H.**

### A. PULSE MODE OPERATION





**B. PRESENCE MODE**

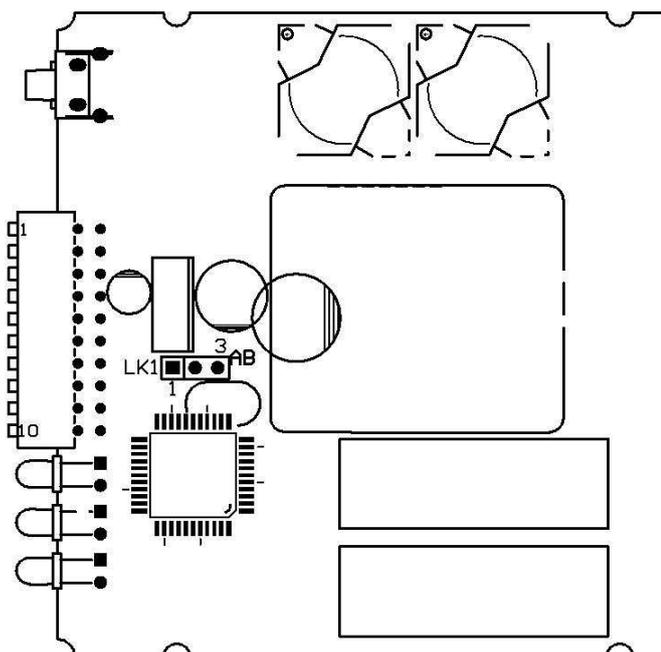


**To Configure A – B Logic Operation**

**Internal Link Selection**

There are one 3 way link located inside the PD230 that is used to configure the AB Logic options. This link has been placed inside the unit to avoid incorrect operation due to selection by unauthorised persons.

The internal link selections are illustrated in the following diagram.



LK1 AB Logic Selection		
	Link from Pin 1 to Pin 2	Presence AB Logic
	Link from Pin 2 to Pin 3	Pulse AB Logic
	Link open Leave link on Pin 2 only	No AB Logic