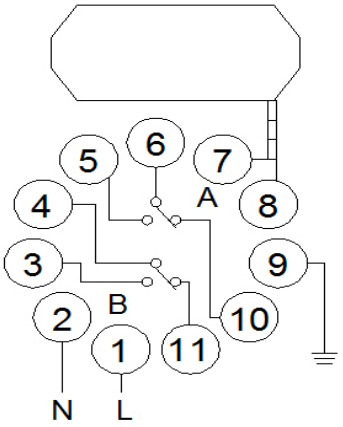
PD-150 series single channel vehicle detector user guide

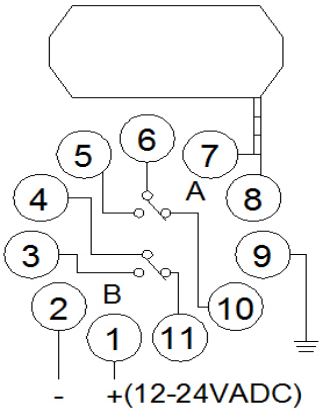
一、 Connections(for EURO)

Pin	PD-150	PD-152
1	100-240V AC	12-24VADC
2	100-240V AC	12-24VADC
3	Pulse B Relay N.O	
4	Pulse B Relay COM	
5	Presence A Relay N.O	
6	Presence A Relay COM	
7	Loop	
8	Loop	
9	Chassis Ground	
10	Presence A Relay N.C	
11	Pulse B Relay N.C	

PD-150



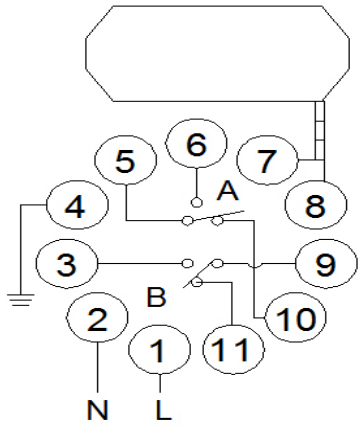
PD-152



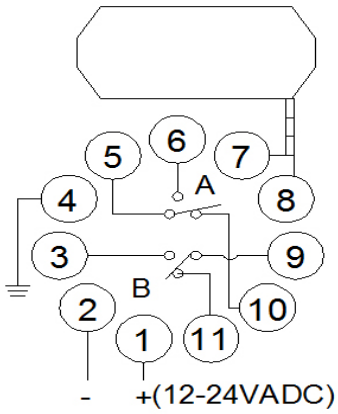
For USA

Pin	PD-155	PD-156
1	100-240V AC	12-24VADC
2	100-240V AC	12-24VADC
3	Pulse B Relay N.O	
4	Chassis Ground	
5	Presence A Relay COM	
6	Presence A Relay N.O	
7	Loop	
8	Loop	
9	Pulse B Relay COM	
10	Presence A Relay N.C	
11	Pulse B Relay N.C	

PD-155



PD-156



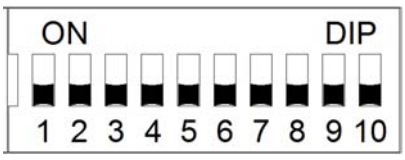
二、 Indicates and Switch

(1) **Power Led:** RED power LED indicates “Power ON”

Detecting Led: Continuously On: Indicates vehicle detection.

Blinking slowly: Indicates loop is short circuit or the number of twists after the loop is not enough.

Blinking fast: Indicates loop is open circuit or too many twists after the loop.



(3) **Switch (Dipswitch Settings)**

1. **Filter Mode :**

DIP 1 The filter mode is selected with the mode Switch No. 1 shown below. The filter produces a delay turn-on time of two seconds when a vehicle occupies the loop.

DIP 1	
OFF	Disabled
ON	Enabled

2. **Automatic Sensitivity Boost**

DIP 2 Automatic sensitivity boost is a mode which alters the un-detect level of the detector. This mode is selected By Switch No. 2 on the front of the enclosure:

DIP 2	
OFF	Disabled
ON	Enabled

3. Pulse Relay

DIP 3 The pulse relay may be made to operate on detect (entry) or on undetect (exit) of a vehicle.

DIP 3	
OFF	Pulse on Detect
ON	Pulse on Undetect

4. Presence Time

DIP 4 The presence time may be set to permanent presence or to limited presence. In permanent presence mode the detector will continuously compensate for all environmental changes whilst there is a vehicle present over the loop.

DIP 4	
OFF	Limited Presence
ON	Permanent Presence

5. **Presence Output Delay Time**

DIP 5 and DIP 6 The presence output delay time may be set to A relay output relay.

DIP 5	DIP 6	
OFF	OFF	0 Sec
ON	OFF	4 Sec
OFF	ON	10 Sec
ON	ON	20 Sec

6. Sensitivity

DIP 7 and DIP 8 The sensitivity of the detector allows the detector to be selective as to the change of inductance necessary to produce a detect.

DIP 7	DIP 8	
OFF	OFF	LOW
ON	OFF	Medium-LOW
OFF	ON	Medium-High
ON	ON	High

7. Frequency Switch

DIP 9 and DIP 10 The frequency switches are the lower two switches.

DIP 9	DIP 10	
OFF	OFF	LOW
ON	OFF	Medium-LOW
OFF	ON	Medium-High
ON	ON	High

* In the application, where two or more loop detectors and sensing loops have been installed, set one detector to high frequency and the other set to low frequency to minimize the effects of cross-talk between the two systems(The sensing loops and detectors should be positioned at least 2m apart).

Reset Button: Please note: The LD-100 must be reset every time a setting change is made to the Dip switches.

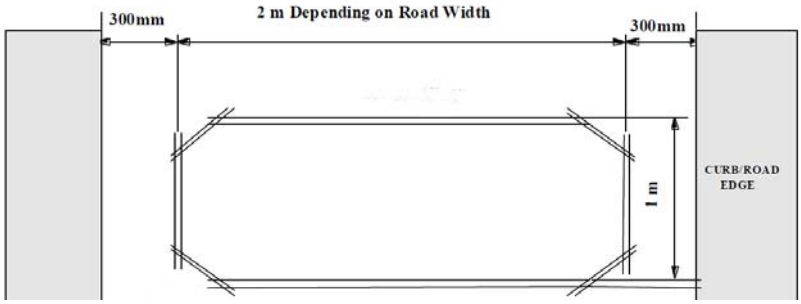
三、Detector position and installation

1. Install the detector in a weatherproof housing.
2. The detector should be as close to the sensing loop as possible.
3. The detector should always be installed away from strong magnetic fields.
4. Avoid running high voltage wires near the loop detectors.
5. Do not install the detector on vibrating objects.
6. When the control box is installed within 10 metres of the loop, normal wires can be used to connect the control box to the loop. More than 10 metres requires the use of a 2 core shielded cable. Do not exceed 30 metres distance between control box and loop.

四、Loop Installation:

The loops are sealed using a “quick-set” black epoxy compound or hot bitumen mastic to blend with the roadway surface.

Loop perimeter	Cylinder numbers
3 ~ 4 M	6
4 ~ 6 M	5
6 ~ 10 M	4
10 ~ 20 M	3
20 M~ UP	2



五、Troubleshooting

Symptoms		**Solution**
If the detector is not working		Press reset
If red led indicator is not fully lit		Check for power supply
If green led indicator:	Blinks slowly	It maybe because the loop is short circuit or the no: of turns is not enough.
	Blinks faster	It maybe because the loop is open or the no: of turns is too many.
If no: of turns is not enough		Lower the frequency (if the frequency is still too high, you must add more turns).
If no: of turns is too many		Higher the frequency (if the frequency is still too low, you must remove some turns).