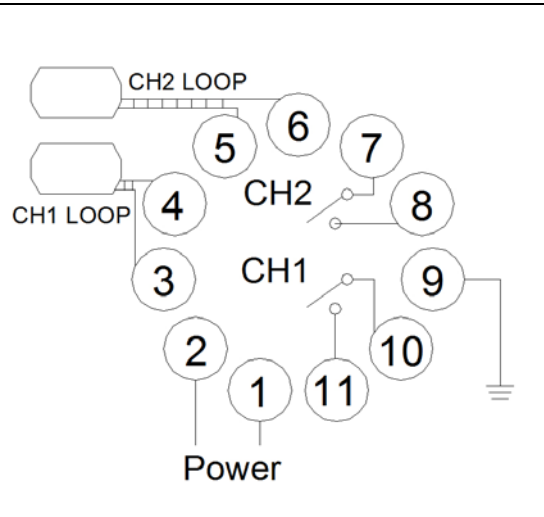


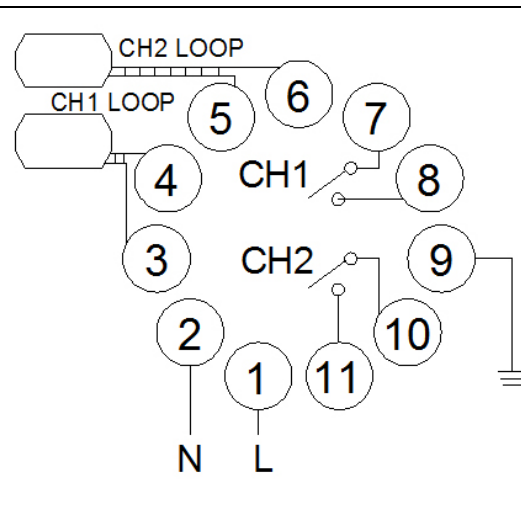
LD-200 Dual Channels Traffic Detector User Guide

一、Connections

Pin	LD-200	LD-202
1	100-240V AC	12-24VADC
2	100-240V AC, Neutral	12-24VADC
3	CH1 LOOP	
4	CH1 LOOP	
5	CH2 LOOP	
6	CH2 LOOP	
7	CH2 Relay COM	
8	CH2 Relay N.O	
9	Chassis Ground	
10	CH1 Relay COM	
11	CH1 Relay N.O	



Pin	LD-205	LD-206
1	100-240V AC	12-24VADC
2	100-240V AC, Neutral	12-24VADC
3	CH1 LOOP	
4	CH1 LOOP	
5	CH2 LOOP	
6	CH2 LOOP	
7	CH1 Relay COM	
8	CH1 Relay N.O	
9	Chassis Ground	
10	CH2 Relay COM	
11	CH2 Relay N.O	



二、Indicates and Switch

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

CH1 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.

CH2 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.

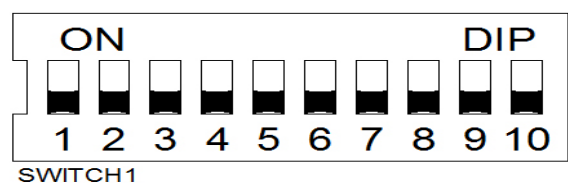
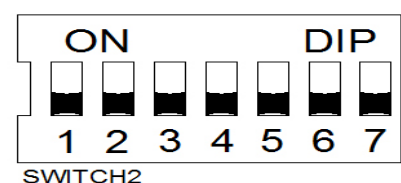
Blinking fast: Indicates loop is open circuit or too many twists after the loop.

(2) **Sensitivity Selection**

Sensitivity and frequency of the loop can be adjusted by 7-way dip switch and 10-way dip switch setting.

User can select 8 different setting by changing the setting of the dip-switch to different modes as in the dip-switch setting tables below. Dip switch 6, 7 and 8 for CH1 sensitivity selection with 0.8 being the least sensitive and 0.015 being the most sensitive.

Dip switch 3, 4 and 5 for CH2 sensitivity selection with 0.8 being the least sensitive and 0.015 being the most sensitive.



(3) Switch 1: Channel 1 Loop Function Selection (10 way dip switch)

1. (Switch 1)DIP 1 & DIP 2 Special Sensitivity Increase For Both Trailer (Both Channels)

DIP NO.	DIP MODE	Function
DIP 1	ON	Increase sensitivity for both channel to avoid unwilling relay Off for leaving especially for trailer
DIP 2 (Automatic Reset (Both channels))	ON	Vehicle can be permanently present. (no auto-reset, unless vehicle has left or manual reset)
	OFF	Normal mode, (automatic reset after 10minutes present of vehicle, used to solve the mistake operation. If it is recommended).

2. (Switch 1)DIP 3 Setting Special Functions

DIP NO.	DIP MODE	Function
DIP 3	ON	Direction Detection. (If vehicle moves from CH1 to CH2, then CH1 relay output; if vehicle moves from CH2 to CH1, then CH2 relay output).
	OFF	Normal mode, two loop detection are separated.

3. (Switch 1)DIP 4 Setting Special Functions

DIP NO.	DIP MODE	Function
DIP 4	ON	CH1 relay will be present output.
	OFF	CH1 relay output type is pulse.

4. (Switch 1)DIP 5 Setting Special Functions

DIP NO.	DIP 5	Function
DIP MODE	ON	When vehicle has left the loop, CH1 relay will delay 200ms and will give present output for 600ms.
	OFF	When vehicle goes in, CH1 relay is in present output for 200ms.

5. (Switch 1)DIP 6 & DIP 7 & DIP 8 Setting CH1 Sensitivity Selection. (Eight Levels Choices)

DIP NO.	DIP 6	DIP 7	DIP 8	Sensitivity (%)
DIP MODE	ON	ON	ON	0.015 (highest sensitivity range).
	ON	ON	OFF	0.02
	ON	OFF	ON	0.04

	ON	OFF	OFF	0.08
	OFF	ON	ON	0.12
	OFF	ON	OFF	0.2
	OFF	OFF	ON	0.5
	OFF	OFF	OFF	0.8 (lowest sensitivity range)

6. (Switch 1)DIP 9 & DIP 10 Setting Frequency (40 K to 100 KHz). Used to avoid the interference

DIP NO.	DIP 9	DIP 10	Frequency
DIP MODE	OFF	OFF	High
	ON	OFF	Medium-High
	OFF	ON	Medium-Low
	ON	ON	Low

(4) Switch 2 :Channel 2 Loop Function Selection (7 way dip switch)

1. (Switch 2)DIP 1 Relay Output Type Selection

DIP NO.	DIP MODE	Function
DIP 1	ON	CH2 relay will be present output
DIP 1	OFF	CH2 relay output type is pulse

2. (Switch 2)DIP 2 CH2 Relay Pulse Output Type Selection

DIP NO.	DIP MODE	Function
DIP 2	ON	When vehicle has left the loop, CH2 relay will delay 200ms and will give present output for 600ms
	OFF	When vehicle goes in, CH2 relay is in present output for 200ms

3. (Switch 2)DIP 3 & DIP 4 & DIP 5 Setting CH1 Sensitivity Selection. (Eight Levels Choices)

DIP NO.	DIP 3	DIP 4	DIP 5	Sensitivity (%)
DIP MODE	ON	ON	ON	0.015 (highest sensitivity range).
	ON	ON	OFF	0.02
	ON	OFF	ON	0.04
	ON	OFF	OFF	0.08

	OFF	ON	ON	0.12
	OFF	ON	OFF	0.2
	OFF	OFF	ON	0.5
	OFF	OFF	OFF	0.8 (lowest sensitivity range)

4. (Switch 2)DIP 6 & DIP 7 Setting Frequency (40 K to 100 KHz). Used to avoid the interference

DIP NO.	DIP 6	DIP 7	Frequency
DIP MODE	OFF	OFF	High
	ON	OFF	Medium-High
	OFF	ON	Medium-Low
	ON	ON	Low

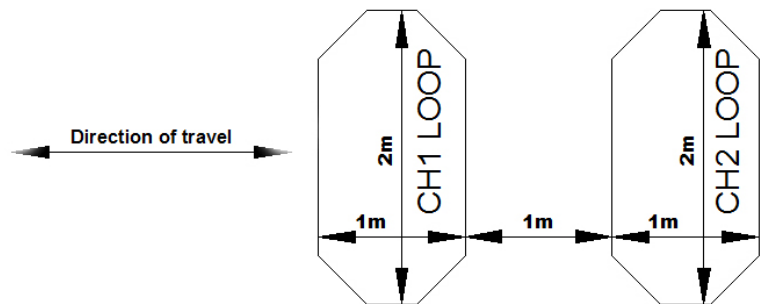
* In the application, where two or more loop detectors and sensing loops have been installed, set one detector to high frequency and the other set to low frequency to minimize the effects of cross-talk between the two systems(The sensing loops and detectors should be positioned at least 2m apart).

Reset Button: Please note: The LD-200 must be reset every time a setting change is made to the Dip switches.

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



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).