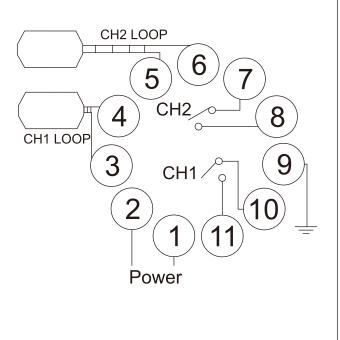
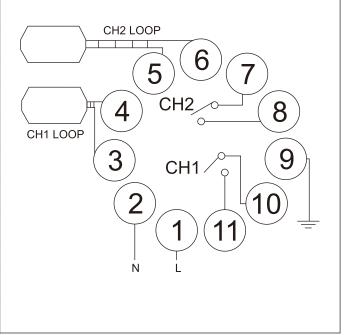
### **Dual Channels Traffic Detector User Guide**

#### 1.Connections

Pin	LD-200	LD-202	
1	100-240VAC	12-24VADC	
2	100-240VAC,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	100-240VAC	12-24VADC	
2	100-240VAC,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		



#### 2.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.

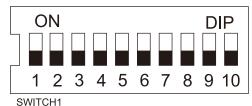
Blinking fast: Indicates loop is open circuit or too many twists after the loop.

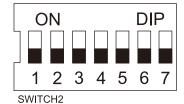
#### (2)Sensitivity Selection

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=S1: 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	ON	Vehicle can be permanently present. (no auto-reset, unless vehicle has left or manual reset)
Both channels)	OFF	Normal mode, (automatic reset after 10minutes present of vehicle, used to solve the mistake operation. If it is recommended).

# 2. (Switch 1=S1)D 3,D4,D5 and (Switch 2=S2) D1,D2 Setting Special Functions(Mode1,2,3 Direction Detection. Mode4,5,6 Normal mode, two loop detection are separated.)

	S1	S2	Function		
Mode 1	D3->ON		Direction Detection. (If vehicle moves from CH1 to CH2,		
	D4->OFF	D1->OFF	and left CH1, then CH1 relay pulse output; if vehicle moves from CH2 to CH1, and left CH2, then CH2 relay		
	D5->ON/OFF	D2->ON/OFF	pulse output).		
Mode 2	D3->ON		Direction Detection. (If vehicle moves from CH1 to CH2,		
	D4->ON	D1->ON	and goes in CH2, then CH1 relay presence output; if vehicle moves from CH2 to CH1, and goes in CH1, then		
	D5->OFF	D2->OFF	CH2 relay presence output).		
Mode 3	D3->ON		Direction Detection. (If vehicle moves from CH1 to CH2,		
	D4->ON	D1->ON	and goes in CH1, then CH1 relay presence output; if vehicle moves from CH2 to CH1, and goes in CH2, ther CH2 relay presence output).		
	D5->ON	D2->ON			
Mode 4	D3->OFF		CH1 and CH2 are separated presence output.		
	D4->OFF	D1->OFF			
	D5->ON/OFF	D2->ON/OFF			
Mode 5	D3->OFF		When vehicle goes in CH1, then CH1 relay is pulse		
	D4->ON	D1->ON	output; When vehicle goes in CH2, then CH2 relayis pulse output.		
	D5->OFF	D2->OFF			
Mode 6	D3->OFF		If vehicle goes in CH1, when left CH1, CH1 relaypulse		
	D4->ON	D1->ON	output; if vehicle goes in CH2, when left CH2, CH2 relay pulse output.		
	D5->ON	D2->ON			

3. (Switch 1=S1)D6 & D7 & D8 and (Switch 2=S2)D3 & D4 & D5 Setting CH1 and CH2 Sensitivity Selection. (Eight Levels Choices)

S1	S2	Sensitivity (%)							
		0.015(Highest)	0.02	0.04	0.08	0.12	0.2	0.5	0.8(Lowest)
D6	D3	ON	ON	ON	ON	OFF	OFF	OFF	OFF
D7	D4	ON	ON	OFF	OFF	ON	ON	OFF	OFF
D8	D5	ON	OFF	ON	OFF	ON	OFF	ON	OFF

4. (Switch 1=S1)D9 & D10 and (Switch2=S2)D6,D7 Setting Frequency (20 K to 100 KHz).

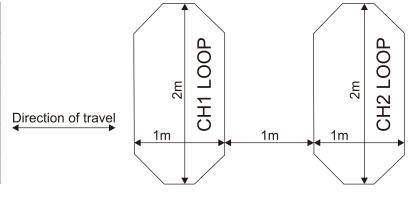
S1	S2	Frequency			
		High	Medium-High	Medium-Low	Low
D9	D6	OFF	ON	OFF	ON
D10	D7	OFF	OFF	ON	ON

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

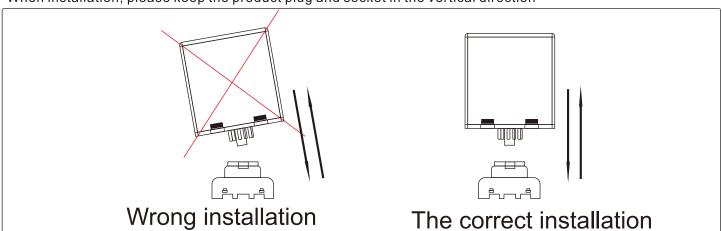
#### 3.Loop Installation:

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	



-When installation, please keep the product plug and socket in the vertical direction



## **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	Blinks slowly	It maybe because the loop is short circuit or the no: of turns is notenough.		
indicator:	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).		