KDS-2001 Loop Vehicle Detector System

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A. Connectors: Please refer to the input power, loop connectors and output connectors

PIN	CONNECTION	
1	AC/DC 12V	
2	AC/DC 12V	
3	PULSE RLY N/O	202
4	PULSE RLY COM	(5) Q(7)
5	PRES. RLY N/O	$(4) \mathbb{L} = \begin{bmatrix} 8 \\ 8 \end{bmatrix}$
6	PRES. RLY COM	Q-JQ
7	LOOP	
8	LOOP	
9	EARTH	
10	PRES. RLY N/C	NL = POHER
11	PULSE RLY N/C	

B. Operation Panel and Switches:

1. POWER: Red LED Indicator. If it is in full lit, power is supplied.

2. DETECT: Green LED Indicator. If it is in full lit, a vehicle is detected. If it is blinking, the loop is faulty.

C. DIP SWITCH (DIP1~10):

(1). DIP 1 & DIP 2: PULSE RLY output types

DIP NO.	DIP 1	DIP 2	PULSE RLY Output Type	Vehicle Present
DIP MODE	OFF∎□	OFF∎□	When vehicle left loop, PULSE RLY is in pulse output for 500ms.	PULSE RLY Output
	□∎ON	OFF∎□	When vehicle left loop. PULSE RLY will delay 2 sec and give a pulse output for 500ms.	PULSE RLY Output (after 2 sec)
	OFF∎□	□∎ON	When vehicle going into loop, PULSE RLY is pulse output for 500ms.	PULSE RLY Output
	□∎ON	□∎ON	PULSE RLY will be present output.	PULSE RLY Output

(2). DIP 3: Automatic Reset

DIP NO.	DIP 3	Present Mode			
DIP MODE	OFF	Vehicle can be permanent present. (no auto-reset, unless vehicle left or manual reset			
		Normal mode. (automatic reset after 30 sec present of vehicle, used to sol the mistake operation, eg: loop is in fault, It can be automatically reset af 30 second)			

(3). DIP 4: Frequency (59KHZ~64KHZ). When they use 2 detector which can be adjust different types of method as High(64KHZ) Low(59KHZ)

DIP NO.	DIP 4	Frequency
DIP 3	□∎ON	Low(Low)
	OFF	High(Hi)

(4). DIP 5 & DIP 6 & DIP 7: Sensor Sensitivity Control

1-8(lowest- highest) level available for sensitivity control and recommend Setting 5 for general level

Sensitivity	DIP 5	DIP 6	DIP 7
1	OFF	OFF	OFF
2		OFF	OFF
3	OFF		OFF
4			OFF
5(usually)	OFF	OFF	
6		OFF	
7	OFF		
8			

(5). DIP 8 & DIP 9 & DIP 10: PRES.RLY Delay Time

DIP NO.	DIP 8	DIP 9	DIP 10	Delay Time	Vehicle Present		
DIP MODE	OFF∎□	OFF	OFF∎□	0 S	PRES.RLY output	Л	
		OFF	OFF∎□	2 S	PRES.RLY output		
	OFF 🗖 🗆		OFF∎□	4 S	PRES.RLY output	5	
			OFF∎□	6 S	PRES.RLY output		_
	OFF∎□	OFF∎□	□∎ON	8 S	PRES.RLY output		
	□∎ON	OFF∎□	□∎ON	10 S	PRES.RLY output	1	5
	OFF∎□			12 S	PRES.RLY output	7	
	□∎ON		□∎ON	14 S	PRES.RLY output	1	

(6).RESET Button: Press the RESET button will reset the detector. Reset is normally used after any DIP change and installation.

D. Specification

- 1. Supply power : AC/DC 12V
- 2. Consuming power : normal 1.0W, operation 3.6W
- 3. Operating temperature : -55°C~125°C, humidity 30%-85%
- 4. Size : 105mm(H) × 75mm(W) ×41mm(D)
- 5. Quality of material : aluminum, aluminum
- 6. Weight: 352g
- 7. Detection method : Pass detection mode(Frequency change mode)
- 8. Detection range : All of vehicle
- 9. Sensing range : LOOP COIL width over vehicle space distance
- 10. Detection speed : 0Km-180Km/h
- 11. Detect time : <15ms
- 12. Sensitivity: High sensitivity ~ Low sensitivity (8 Level)
- 13. Alignment : Automatic alignment system
- 14. Timer function : 0-14 Second control the time by option
- 15. Reset function : Reset bottom when error occur
 - (Automatic:30 sec, Manual:Option)
- 16. Output singnal : PRESENT RELAY and PULSE RELAY, relay capacity is 250VAC/5A,110VAC/10A, 24VDC/10A