

# LD250/450/850 SERIES

## 2/4/8 CHANNEL VEHICLE LOOP DETECTORS

The LD250 / LD450 / LD850 are Nema Card multi-channel inductive loop detectors. The detectors are pinout compatible with most Nema Card detectors on the market and are easy to set-up and install. Optional features include a RS485 communications port.

Typical applications in the traffic environment are traffic control (traffic lights), toll systems and vehicle counting.

Standard features of the detector are :

- **Reset Switch.**  
The reset switch enables the detector to be manually reset during commissioning and testing. This results in the detector re-tuning the sensing loop and becoming ready for vehicle detection.
- **Presence / Passage feature.**  
Each channel can be individually setup to operate in presence or passage mode.
- **Selectable Presence Time.**  
Each channel can be individually setup for a presence time of 10 minutes or 1 hour.
- **Switch selectable Sensitivity.**  
Eight sensitivity settings are available on the switches to allow flexibility in configuration.

1	High	-	0.02%	5	-	0.08%
2		-	0.03%	6	-	0.16%
3		-	0.04%	7	-	0.32%
4		-	0.06%	8	Low	Off
- **Switch selectable Frequency.**  
Two frequency settings are available to prevent cross-talk between adjacent loops.

### TECHNICAL DATA

1. **POWER REQUIREMENT:** 19.6V - 28.8VDC
2. **PRESENCE RELAY OUTPUT :** This output has a normally open relay contact.
3. **INDICATORS:** LED indicators show: Detect state.
4. **DETECTOR TUNING RANGE:** 15 - 1500 uH.
5. **FREQUENCY:** Two step adjustable.
6. **PROTECTION:** Loop isolation transformer, zener diode & NEON protection on loop.
7. **CONNECTOR:** 2 X 22 Terminal
8. **DIMENSIONS:** 175mm X 114mm X 25mm
9. **OPERATING TEMPERATURE:** -40°C to +80°C
10. **STORAGE TEMPERATURE:** -40°C to +85°C
11. **HUMIDITY:** up to 95% non condensing

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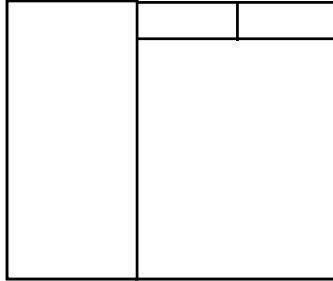
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**SWITCH SETTINGS:**



**SWITCH SETTINGS:**

	ON	OFF
S1	PULS	PRES
S2	10 min	1hr
SENS 0.02%	-	S3/S4/S5
SENS 0.03%	S3	S4/S5
SENS 0.04%	S4	S3/S5
SENS 0.06%	S3/S4	S5
SENS 0.08%	S5	S3/S4
SENS 0.16%	S3/S5	S4
SENS 0.32%	S4/S5	S3
CH OFF	S3/S4/S5	-



**TERMINAL WIRING:**

**TERMINAL FUNCTION**

A	0V DC
B	+ 24V DC Supply
C	Reset
D	CH1 Loop Input
E	CH1 Loop Input
F	CH1 Output N/O
H	CH1 Output Common
J	CH2 Loop Input
K	CH2 Loop Input
L	Earth
M	Comms
N	Comms
P	CH3 Loop Input
R	CH3 Loop Input
S	CH3 Output N/O
T	CH3 Output Common
U	CH4 Loop Input
V	CH4 Loop Input
W	CH2 Output N/O
X	CH2 Output Common
Y	CH4 Output N/O
Z	CH4 Output Common

**TERMINAL FUNCTION**

1	0V DC
2	+ 24V DC Supply
3	N/C
4	CH5 Loop Input
5	CH5 Loop Input
6	CH5 Output N/O
7	CH5 Output Common
8	CH6 Loop Input
9	CH6 Loop Input
10	Earth
11	N/C
12	N/C
13	CH7 Loop Input
14	CH7 Loop Input
15	CH7 Output N/O
16	CH7 Output Common
17	CH8 Loop Input
18	CH8 Loop Input
19	CH6 Output N/O
20	CH6 Output Common
21	CH8 Output N/O
22	CH8 Output Common

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**TERMINAL FUNCTION**

A	0V DC
B	+ 24V DC Supply
C	Reset
D	CH1 Loop Input
E	CH1 Loop Input
F	CH1 Output N/O
H	CH1 Output Common
J	CH2 Loop Input
K	CH2 Loop Input
L	Earth
M	Comms
N	Comms
P	CH3 Loop Input
R	CH3 Loop Input
S	CH3 Output N/O
T	CH3 Output Common
U	CH4 Loop Input
V	CH4 Loop Input
W	CH2 Output N/O
X	CH2 Output Common
Y	CH4 Output N/O
Z	CH4 Output Common

**TERMINAL FUNCTION**

1	0V DC
2	+ 24V DC Supply
3	N/C
4	CH5 Loop Input
5	CH5 Loop Input
6	CH5 Output N/O
7	CH5 Output Common
8	CH6 Loop Input
9	CH6 Loop Input
10	Earth
11	N/C
12	N/C
13	CH7 Loop Input
14	CH7 Loop Input
15	CH7 Output N/O
16	CH7 Output Common
17	CH8 Loop Input
18	CH8 Loop Input
19	CH6 Output N/O
20	CH6 Output Common
21	CH8 Output N/O
22	CH8 Output Common

Note: LD250/450 uses terminals A-Z only.

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