



Parking Alert Signs

Engineered safety systems for you parking facilities

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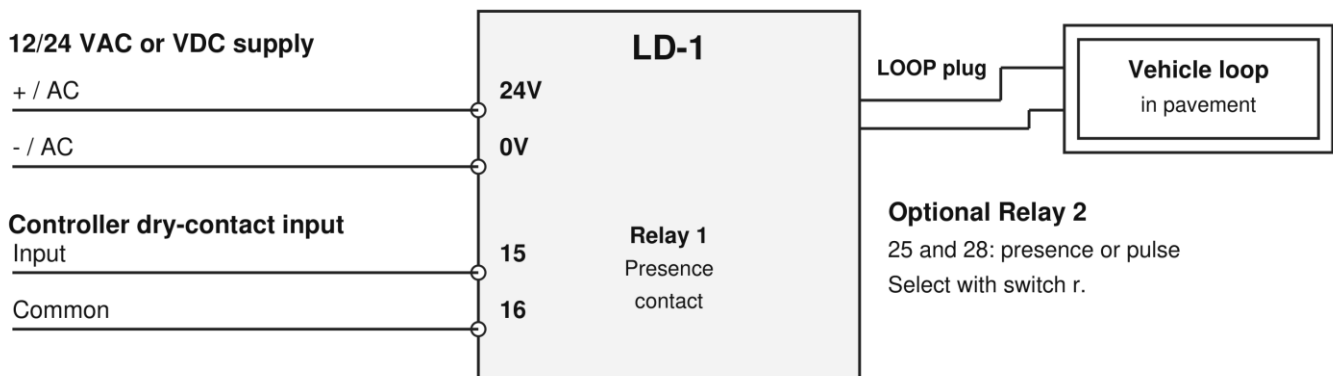


Typical applications

- Vehicle exit and approach detection
- Gate and garage door activation
- Parking and access control systems
- Warning signs, lights, and alarms

Detects vehicles over an installed ground loop and provides relay contacts to compatible control equipment. One loop detects presence; it does not determine travel direction.

Typical wiring



Functional diagram — follow terminal labels on the supplied unit.

Power: The terminal marked 24V accepts 12/24 VAC or VDC on this LD-1 version. For DC, connect positive to 24V and negative to 0V.

Outputs: Relay 1 terminals 15/16 are normally open in the standard configuration and close on detection. Relay 2 terminals 25/28 provide presence or pulse output. Relay contacts do not supply power; connect them to a compatible control input and observe the unit's contact rating.

Loop installation: Follow the loop manufacturer's wire, turns, lead-in, and sealing instructions. Keep the lead-in twisted and away from power cables. Protect the wire from damage and movement.

LD-1 QuickSheet

Single Channel Vehicle Loop Detector

General installation and wiring

Basic information

Item	LD-1
Power input	12/24 VAC or VDC
Loop inductance	50–800 μ H
Sensitivity	Four selectable levels
Outputs	Two isolated relay contact pairs
Mounting	DIN rail in a protected enclosure
Protection	IP20; keep dry
Size	3.1 × 0.9 × 3.5 in. 79 × 22.5 × 90 mm

Quick setup

1. Disconnect power. Mount the detector and connect the loop, supply, and required output.
2. Start with Low-mid sensitivity; set h, r, d, and f LEFT. Use a different frequency if a nearby detector interferes.
3. Clear all vehicles from the loop, then power up. Wait for tuning to finish.
4. Drive onto and off the loop. Verify detection and the connected equipment before use.



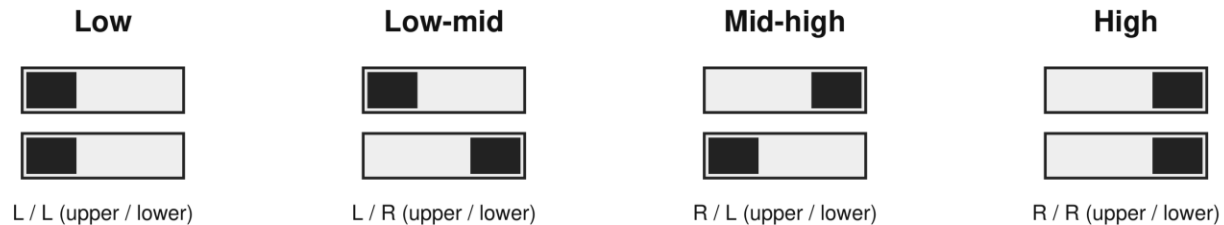
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For the blue LD-1 with s, h, r, d, and f switches. LEFT and RIGHT mean slider direction when looking at the front label. Match the legend on your unit.

Sensitivity — top two switches marked s



Start at Low-mid. Increase only as needed to detect the vehicles using the site. After adjustment, restart with the loop empty and test for both reliable detection and false triggers.

Switch	LEFT	RIGHT
h Presence hold	Continuous presence	5-minute limit, then retune
r Relay 2 function	Presence output	Pulse output
d Detection delay	No added delay	2-second delay
f Loop frequency	Low	High

The 5-minute hold limit can clear detection while a vehicle remains over the loop. Switch r affects Relay 2, not the Relay 1 contact pair at 15/16. Use different frequencies on nearby detectors if needed.

Status lights

Green	Red	Meaning
On	Off	Ready; loop clear
On	On	Vehicle detected
Flashing	Off	Tuning / calibration
Off	On	Loop fault / disconnected
Off	Off	No power

Test the installation

- Keep the loop clear during power-up or recalibration.
- Test the smallest expected vehicle and all normal stopping positions.
- Check that the output releases after the vehicle leaves.
- Recheck adjacent lanes for unwanted detection.

Installation notes

Use a protected control enclosure. Disconnect the LD-1 before continuity or insulation testing of the loop. For gate or door applications, retain all required safety devices.

Need help

480-689-1993 | Support@PassSigns.com | www.passsigns.com

Have the supply voltage, switch positions, LED status, and a photo of the detector label available when contacting support.

LD-1 QuickSheet

Single Channel Vehicle Loop Detector

Switch settings and troubleshooting

Troubleshooting

Symptom	What to check
No lights	Measure supply at 0V and 24V. Check the source, wiring, and DC polarity.
Loop fault	Check the loop plug, connections, wire continuity, insulation, and inductance. Disconnect the detector before loop tests.
Missed detection	Increase sensitivity as needed. Check loop placement, vehicle position, and the 2-second delay setting.
False or unstable detection	Check for loose or damaged wiring and loop movement. Separate lead-in from power cables; try the other frequency.
Output stays active	Clear the detection area. Check for metal over the loop, then restart with the loop empty. Verify the external controller settings.
Detection works; equipment does not	Check the selected contact pair, switch r if using Relay 2, and the controller's input requirements.