SXK-PD132

Single Loop Vehicle Detector

An inductive loop detector for parking barriers, automatic gates and vehicle access systems. One buried road loop detects vehicle occupancy, while two relay outputs provide presence signals or a presence signal with a delayed exit pulse.



8 position DIP switch | Reset button | 11 pin plug-in base

Loop inputs	Relay outputs	Sensitivity	Frequency selection
1	2	4 levels	4 levels

Product highlights

Automatic calibration. Approximately 1 second of self-calibration at power-up. Power and detection LEDs support commissioning and loop fault diagnosis.

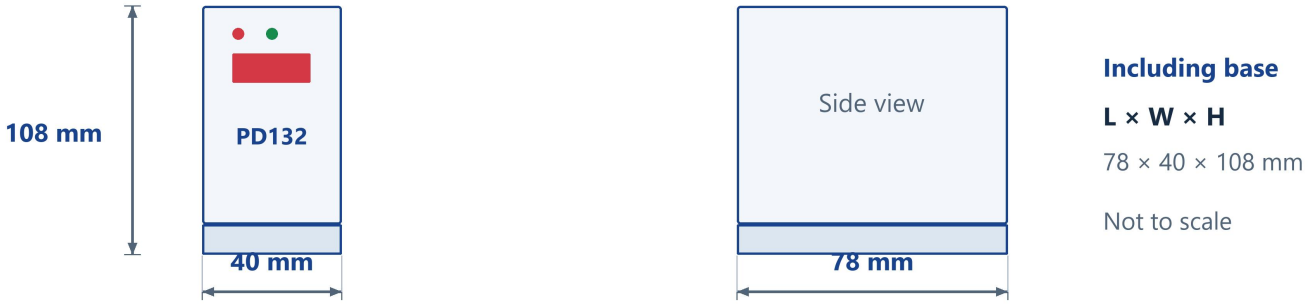
Configurable detection. Four frequency levels, four sensitivity levels, automatic sensitivity boost and enhanced filtering help match the detector to the loop and environment.

Selectable relay operation. Choose two presence outputs or presence plus a delayed exit pulse. Select continuous presence hold or a 10 minute limit.

Technical specifications

Choose the supply version to match the installation. Voltage options are separate versions; connect only the supply shown on the delivered detector nameplate.

ENCLOSURE DIMENSIONS



Including base

L × W × H

78 × 40 × 108 mm

Not to scale

Parameter	Specification
Model	SXK-PD132
Detection principle	Single channel inductive loop vehicle detection
Supply options	230V or 110V AC ±10%, 50 Hz; 24V or 12V AC/DC ±10% options
Rated power	4.5 W
Relay outputs	2 relay outputs; presence or presence plus delayed exit pulse
Relay rating in manual	5 A at 240V AC
Operating frequency	20 to 170 kHz; 4 selectable frequency levels
Sensitivity	4 selectable levels
Response time	10 ms specified; enhanced filtering increases response time
Calibration	Automatic at power-up, approximately 1 second
Presence hold	Continuous or limited to 10 minutes
Exit pulse timing	With DIP7 ON: 500 ms delay after exit, then 500 ms d1 pulse
Loop inductance	100 to 300 µH recommended
Loop resistance	Less than 10 Ω total
Loop footprint	At least 1 × 2 m recommended
Loop lead	5 m maximum recommended; at least 20 twists per meter
Operating environment	-20 to +65 °C; relative humidity ≤90%, non-condensing
Enclosure size including base	78 × 40 × 108 mm; length × width × height

Connections and loop installation

Install the detector in a dry, protected control cabinet close to the loop. The numbered connections below follow the supplied reference diagram; match the base numbering and unit label before wiring.

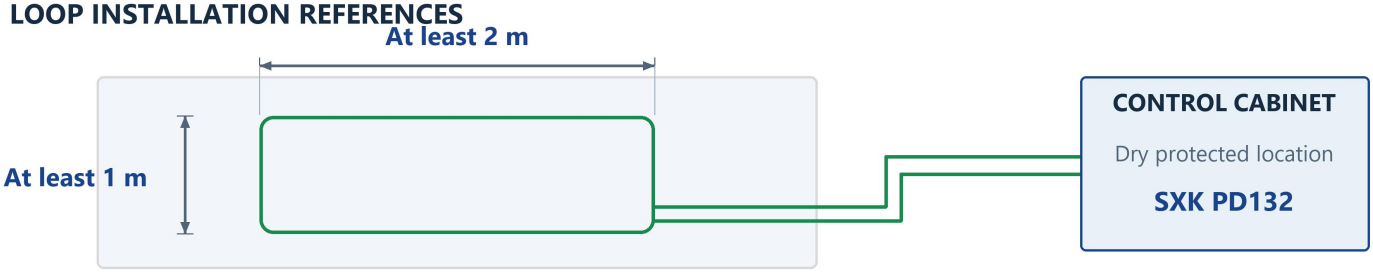
FUNCTIONAL WIRING



Contact functions shown; not a socket orientation drawing. Match the physical base numbering.

Pin or pair	Function	Reference connection
1 and 2	Power supply	Match delivered voltage version and nameplate polarity
7 and 8	Loop input	Connect the twisted lead pair from the buried loop
6 / 5 / 10	Relay d1	Common / normally open / normally closed
4 / 3 / 11	Relay d2	Common / normally open / normally closed
9	No connection shown	Unused in the supplied reference wiring diagram

LOOP INSTALLATION REFERENCES



Turns and saw-cut geometry depend on the site and target inductance.

Loop construction and placement

Use PTFE insulated high-temperature flexible conductor larger than 1 mm² as recommended in the manual. A 2.5 mm² nylon-sheathed conductor may be considered for harsh conditions or longer lead routes. Select the turns to achieve the recommended 100 to 300 µH and keep the total loop resistance below 10 Ω.

Avoid strong magnetic fields, excessive heat and moving metal near the loop. Keep the lead pair twisted at least 20 times per meter and no longer than 5 m where possible. Choose different detector frequency settings for adjacent loops and validate separation under actual conditions.

DIP switch settings and relay timing

The 8 position switch selects frequency, sensitivity, filtering and output behavior. Use the ON marking on the physical switch to determine the lever direction.

Switch pair	ON / ON	ON / OFF	OFF / ON	OFF / OFF
DIP1 and 2	Low frequency	Medium low	Medium high	High frequency
DIP3 and 4	Low sensitivity	Medium low	Medium high	High sensitivity

Switch	ON setting	OFF setting
DIP5	Automatic sensitivity boost enabled	Automatic sensitivity boost disabled
DIP6	Enhanced filtering enabled	Normal filtering; recommended for normal sites
DIP7	d2 presence plus delayed exit pulse from d1	d1 and d2 both follow loop occupancy
DIP8	Continuous presence while loop remains occupied	Presence limited to 10 min, followed by reset

For DIP1/2 and DIP3/4, each pair is listed in numerical order. Start at a low sensitivity and raise it only until representative vehicles are detected reliably. Enhanced filtering reduces sensitivity and increases response time.

DIP7 ON OUTPUT TIMING



DIP8 controls presence hold. Pulse timing is shown relative to vehicle exit.

Commissioning and operating indications

Calibrate with the loop clear. Keep vehicles off the loop during power-up or reset. Both LEDs illuminate during calibration; the detection LED goes off after successful calibration and illuminates when a vehicle is detected.

Check occupancy and departure. Test both relay outputs using the selected DIP7 mode. Continuous presence with DIP8 ON is recommended for normal operation; the limited mode recalibrates after 10 minutes of occupancy.

Resolve loop faults before adjusting filters. A flashing detection indicator during calibration indicates that the loop has not been detected. Inspect continuity, lead twisting, inductance and installation, then adjust frequency and sensitivity before enabling enhanced filtering.

Thinkpark Technology Co., Ltd | tom@autobarriergate.com sales@sxkchina.com

Specifications are subject to change without notice. Please confirm final configuration and certifications with our sales team before ordering.