

VEHICLE LOOP DETECTOR USER'S GUIDE

NO.9001-90011024 110M

■ Install Detector

The loop detectors must only be placed in dry rooms or control cabinets that are protected against all types of moisture and wetness. A distance of at least 10 mm from other devices must be maintained on each side. The ambient temperature must not exceed 65°C. The installation of the induction loop is described in other operating instructions.

■ Operation and Indication

When the power is on, the red power indicator will on, detector will spend 2 seconds to calibrate automatically. During the calibration, car can't on loop. Green diagnosis indicator flash as follows:

Flash Slowly - detector is calibrating

Flash Quickly - no loop is detected

Off - vehicle does not enter the loop

On - vehicle enter the loop

■ Frequency

To eliminate interference of two neighbouring wire loops or loop detectors, the frequency can be altered by DIP4 on the main board in the box.

DIP4 ON is low, OFF is high.

■ Sensitivity

The response sensitivity can be set using the threestage switch on the front. The setting "L" corresponds to the lowest sensitivity. "M" is the medium sensitivity and "H" is the highest sensitivity. After set sensitivity, loop detector will reset and acalibration automatically.

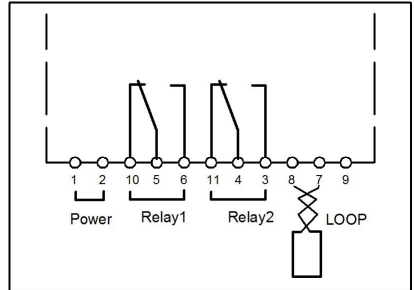
【Attention】

If the detector isn't working normally, you must check the loop and wiring at first, and then alter the frequency or the sensitivity.

■ Relay Output

The output of relay 2, When a vehicle is detected passing over the inductive loop, the relay 2 is energized(Pin 3 and Pin 4 is shorted) until the vehicle is detected leaving the loop.

■ Wiring Diagram



The output of relay 1, if DIP1 is off, When a vehicle is detected passing over the inductive loop, the relay1 is energized (Pin 5 and Pin 6 is shorted) until the vehicle is detected leaving the loop; if DIP1 is ON, When a vehicle is detected leaving the loop, relay1 is energized (Pin 5 and Pin 6 is shorted) 1000 mS after 500 mS.

■ Presence Time

This function use with barrier gate, recommended DIP2 turned ON and the presence signal will be permanently present.

DIP2 pull to OFF, the Max presence signal time is 5mins, if more than 5 minutes, the detector will automatically reset, initial state is no vehicle present.

■ Output Delay

DIP3 is OFF, delay function is turned off.

DIP3 is ON, delay function is turned on.

If DIP1 is OFF, the relay1 continues to output signal 2 seconds then break after vehicle leaves loop.

If DIP1 is ON, the relay1 output pulse signal (1 second) after vehicle leaves loop 2.5 seconds later.

■ Reset

The detector automatically reset after power on or sensitivity setting or over 5mins under limited presence mode.

■ Technical Data

Supply voltage: 110V AC; or 24V DC/AC, 12V DC/AC selectable

Voltage tolerance AC: +10% / -15%; Voltage tolerance DC: $\pm 15\%$

Power Consumption: 2VA;

Output relays: 3A 120VAC, 3A 24VDC;

Operating temperature: -20°C to $+65^{\circ}\text{C}$; Storage temperature: -40°C to $+85^{\circ}\text{C}$

Frequency range: 20 kHz to 170 kHz;

Reaction time: 10ms, Presence time: Infinite or 5mins;

Sensitivity: Adjustable in 3 increments;

Loop inductance: Total loop plus connection wiring: $50\mu\text{H}$ to $1000\mu\text{H}$, Ideal is $100\mu\text{H}$ to $300\mu\text{H}$;

Loop connection wiring: Maximum length 20 meters, twisted at least 20 times per meter;

Size of Housing: 78x40x108 mm (L x W x H)