220S DOUBLE VEHICLE DETECTOR

NO:V1.0-220S-2310

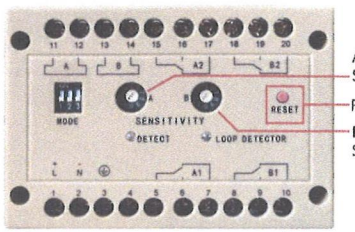
1.TECHNICAL PARAMETERS.

Working power: AC220V\AC110V\DC24V\DC12V See the label on the body for details
Sensitivity :0-9 adjustable
Operating frequency: 20KHz - 170KHz
Detection time: 35ms
Operating temperature: -40℃ ~ +65℃
Relative humidity: ≤ 95%
Storage temperature: -40℃ ~ +85℃
Detection channels: 2
Environmental drift: Automatic drift compensation

Rated power: < 5W
Installation method: DIN track
Size: 100*70*118mm
Output mode: relay

2. Wiring Diagram

Pin definition	analyze	Pin definition	analyze
1	Power input	11	Loop A
2	Power input	12	Loop A
3	Ground wire	13	Loop B
4		14	Loop B
5	A1 com	15	A2 com
6	A1 Normally open	16	A2 Normally open
7	A1 Normal close	17	A2 Normal close
8	B1 com	18	B2 com
9	B1 Normally open	19	B2 Normally open
10	B1 Normal close	20	B2 Normal close



Reset button: When the power is turned on, the auto detector will automatically reset to no car state. After each adjustment of sensitivity or DIP switch, manually press the reset button without car.

3.Debugging sensitivity

Sensitivity adjustment uses the "A" and "B" rotary coding switches on the left side of the panel. The "A" rotation code corresponds to the sensitivity of coil A, and the "B" rotation code corresponds to the sensitivity of coil B. There are ten levels, with "0" being the lowest and "9" being the highest. During trial operation, first set the sensitivity to "5". If the detector does not respond after actual testing, the sensitivity should be increased by one level. Repeat this process several times until the detector reaches its optimal state. Note: "High" sensitivity should be used with caution! If the number of detector coils is small, the sensitivity is adjusted to "high", and the reaction is too fast, which will cause the coil to be mistakenly detected as having a car when there is no car, and the phenomenon of "suspended animation" appears.

4.Working frequency adjustment

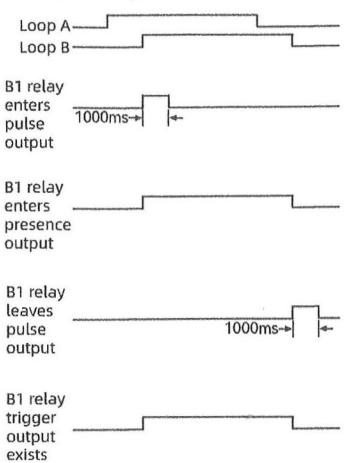
The user can change the operating frequency of the coil to avoid interference from adjacent coils or ambient frequencies. The vehicle detector provides four kinds of frequency adjustment (open the interior of the vehicle detector as shown below). When adjusting, you need to remove the panel and pull out the circuit board to dial 1 and 2 dip switches for adjustment. 1 and 2 dip switches correspond to the frequency adjustment of coil A; 3 and 4 DIP switches correspond to the frequency adjustment of coil B.

5.Relay output mode

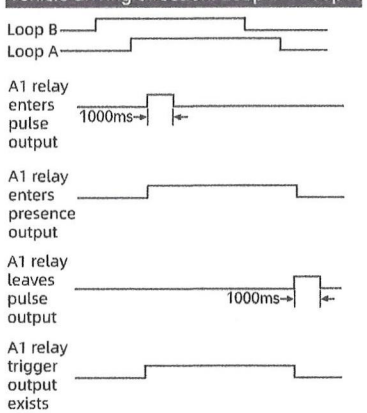
1. Direction detection (relay A1, B1 outputs one coil to trigger hold, then triggers another coil, corresponding relay output)

Dip setting	Relay function	Function description
ON 1 2 3	Incoming pulse output (Factory default)	1. When the vehicle passes from coil A to coil B, relay B1 Output direction pulse (1000 ms). 2. When the vehicle passes from coil B to coil A, relay A1 Output direction pulse (1000 ms).
ON 1 2 3	In-presence output	1. When the vehicle passes from coil A to coil B, relay B1 output until vehicle leaves coil A and coil B. 2. When the vehicle passes from coil B to coil A, relay A1 output until the vehicle leaves coil B and coil A.
ON 1 2 3 / ON 1 2 3	Departure pulse output	1, when the vehicle passes from coil A to coil B, and from coil B After the direction leaves, relay B1 closes for 1000 milliseconds After release. 2, when the vehicle passes from coil B to coil A, and from coil A After the direction leaves, relay A1 closes for 1000 milliseconds After release.
ON 1 2 3	Trigger presence output (when single way)	1. When the A coil has a car "enter", the relay A1 is closed. Relay A1 disconnects after car leaves. 2. When the B coil has a car "enter", the relay B1 is closed. Relay B1 disconnects after car leaves.

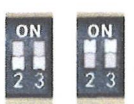
Vehicle driving direction: Loop A→Loop B



Vehicle driving direction: Loop B→Loop A



2. Auxiliary relay (A2,B2) output (independent of direction detection)



When DIP switches 2 and 3 are set to OFF or ON

When the car enters coil A, relay A2 outputs and disconnects after leaving.
When the car enters the B coil, relay B2 outputs and disconnects after leaving.

 When DIP switch 2 is set to ON and DIP switch 3 is set to OFF	When a car enters coil A, relay A2 outputs 1000 milliseconds to disconnect Relay B2 outputs 1000 milliseconds to disconnect when a car enters coil B
 When DIP switch 2 is set to OFF and DIP switch 3 is set to ON	When coil A has a car "leaving", relay A2 outputs 1000 milliseconds to disconnect When coil B has a car "leaving", relay B2 outputs 1000 milliseconds to disconnect