

DIP-Switch 1...8

LED red
LED blue

DIP-Switch 9...12

Diagnostic (USB)

Reset Button

1 General

The Traffic Detector is a system used for vehicle detection with inductive loops.

1.1 Area of application:

- Barrier controls
- Door- and gate controls
- Parking- and traffic engineering

1.2 Characteristic features:

- 11-pole circular connector
- Galvanic separation of loop and detector electronics
- Automatic system adjustment directly after power-on
- Sensitivity adjustment independent of loop inductivity
- Loop busy signal emitted by LED-display
- Potential-free relay contacts at the outputs
- Loop fault message via LED-signal
- Indication of historical loop fault
- Continuous rebalancing of frequency drifts in order to avoid environmental influences
- Diagnostics by external Service Program via USB-Mini connector

2 Settings

Use the following DIP Switches for the standard settings.

2.1 Sensitivity

DIP 1	DIP 2	Function
OFF	OFF	Low
ON	OFF	Medium Low
OFF	ON	Medium High
ON	ON	High

More detailed Sensitivity settings via USB Interface!

2.2 Frequency

DIP 3	Function
OFF	Low
ON	High

2.3 Extended Presence

DIP 4	Function
OFF	60 Minutes
ON	Infinite

More detailed Hold Time settings via USB interface!

2.4 Delay Output 1

DIP 5	Function
OFF	None
ON	2 seconds delay

Setting doesn't affect Relay 2!

2.5 Extention Output 1

DIP 6	DIP 7	Function
OFF	OFF	0 seconds off delay
ON	OFF	2 seconds off delay
OFF	ON	5 seconds off delay
ON	ON	10 seconds off delay

Setting doesn't affect Relay 2!

2.6 Fail safe / Fail secure

DIP 8	Function
OFF	Fail safe operation
ON	Fail secure operation

Setting doesn't affect Relay 2!

2.7 Mode Output 2

DIP 9	Function
OFF	Presence
ON	Pulse

Setting doesn't affect Relay 1!

2.8 Edge Output 2

DIP 10	Function
OFF	Pulse on entry
ON	Pulse on leave

Setting doesn't affect Relay 1!

2.9 Fault Output 2

DIP 11	Function
OFF	Mode Output 2 as selected with DIP 9
ON	Output 2 is error output

Setting doesn't affect Relay 1!

2.10 Failure Memory

DIP 12	Function
OFF	Normal
ON	Blue LED indicates last error, until detector reset

1 Reset-Button

Pressing push button	LED-display	Operation
1 s	Red LED flashes	Triggers a hardware reset with recalibration and resets the LED output for resolved loop faults
5 s	Blue LED flashes	Triggers factory settings and resets USB-overwrite

2 LED

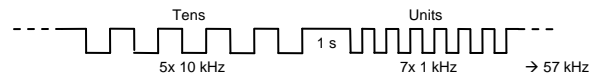
Blue LED	Function
OFF	No supply voltage
ON	Normal
Slow Flash	Loop open
Fast Flash	Loop shorted

Red LED	Function
OFF	Loop free
ON	Loop active
Slow Blink	Delay active
Fast Blink	Extension active

2.1 Frequency blinking

After adjusting loop, the determined frequency is indicated once by blinking red and blue LED.

Example for loop frequency 57 kHz:



3 Diagnostics

To display more details of the induction loop system, e.g. frequency, detuning, busy time, output signals, use the service program.

4 Pin Assignment

Pin	Function
1	Power
2	COM
3	Output 2 N.O.
4	-
5	Output 1 COM
6	Output 1 N.O.

Pin	Function
7	Loop
8	Loop
9	Output 2 COM
10	Output 1 N.C.
11	Output 2 N.C.

5 Technical Data

Dimensions (H x W x L)	76 x 38 x 71 mm
Power Supply	10-30 V AC/DC, max.1 W
Relays	Max. 2 A, 230 VAC, 60 W/125 VA
Operating Temperature	-37 °C...+70 °C
Loop Inductivity	20-700 µH, recommended 100-300 µH
Frequency	30-130 kHz, 2 steps
Supply Line	Max. 200 m
Resistance	Max. 20 Ohm, incl. Loop Supply Line
Connectors	Power, Loop, Relay, Diagnostic
	11-pole circular connector USB-Mini AB

Additional note: Maybe only one frequency adjustment level is available when using induction loops outside of the recommended range. Additionally using lower induction loop values than recommended, can lead to reduced loop resistance values.