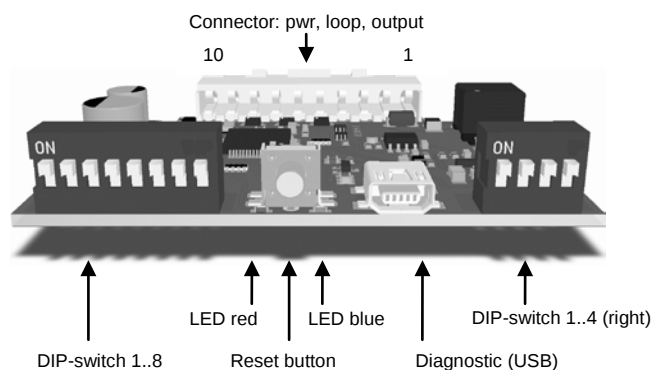




1 General

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:

- Rear mount 10-pin Molex 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
- Open collector transistor outputs referenced to DC common
- 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 1..8 on the left side and DIP switches 1..4 on the right side for the settings.

2.1 Sensitivity

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

2.2 Frequency

DIP 3	Function
OFF	Low
ON	High

2.3 Extended Presence

DIP 4	Function
OFF	60 Minutes
ON	Infinite

2.4 Delay Output 1

DIP 5	Function
OFF	None
ON	2 seconds delay

Setting doesn't affect Output 2!

2.5 Extension 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 Output 2!

2.6 Fail safe / Fail secure

DIP 8	Function
OFF	Fail safe operation
ON	Fail secure operation

Setting doesn't affect Output 2!

2.7 Mode Output 2

DIP 1 (right)	Function
OFF	Presence
ON	Pulse

Setting doesn't affect Output 1!

2.8 Edge Output 2

DIP 2 (right)	Function
OFF	Pulse on entry
ON	Pulse on leave

Setting doesn't affect Output 1!

2.9 Fault Output 2

DIP 3 (right)	Function
OFF	Mode output 2 as selected with DIP 9
ON	Output 2 is error output

Setting doesn't affect Output 1!

2.10 Failure Memory

DIP 4 (right)	Function
OFF	Normal
ON	Blue LED indicates last error, until detector reset

3 Reset-Button

Press reset button 1 s until red LED is flashing to reset/retune detector and clear historical loop fault.

4 LED

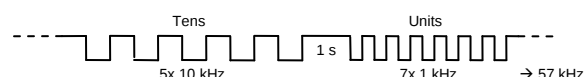
Blue LED	Function
On	Normal
Slow Flash	Loop open
Fast Flash	Loop shorten

Red LED	Function
Off	Loop free
On	Loop active
Slow Blink	Delay
Fast Blink	Extension

4.1 Frequency blinking

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

Example for loop frequency 57 kHz:



5 Diagnostics

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

6 Pin assignment

Pin	Function
1	Loop Input a
2	Loop Input b
3	Power 10-30 VDC, 26 VAC
4	No connection
5	No connection

Pin	Function
6	Output 2 (B)
7	Output 2 (B) inverted
8	Output 1 (A)
9	Power 10-30 VDC, 26 VAC
10	DC Common (GND)

Power input Pin 3 and Pin 9 are internally decoupled with diodes!

7 Technical data:

Dimensions	58 x 14 x 70 mm (H x W x L)
Power supply	10-30 VDC, 26 VAC, max.1 W
Output current	max.100 mA, 30 VDC
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
Connector	Pwr, Loop, Output Molex Series 2145, 10-pin
	Diagnostic USB-mini AB
Operating temperature	-37°C..+70°C