



Control units MAGTRONIC

Detector MID 2 2-channel

The detector MID 2

The microprocessor-controlled MID 2 channel detector can be used for contactless detection of vehicles. Using the connected induction loops, cars, trucks, bicycles, fork lifts and vehicles with metal structures can be detected.

The potential-free output signals can be used for presence registering, monitoring, counting and direction detecting functions, or for opening and closing barriers or gates. High sensitivity, rapid response and static behaviour (i.e. unlimited occupation/balancing) are advantages of the MID unit.

External interference is suppressed using a special measurement method.

Technical system

The entire technical system is accommodated in a plastic housing. Attachment on a standard rail allows the wiring work to be carried out quickly without any problems.

The rotary switches on the front plate can be used to adjust the relay response behaviour and loop sensitivity.

The operating modes, balance, and the presence of vehicles are displayed by the built-in LEDs.

Functions

Connecting the loops

The induction loops must be connected to terminals 11 and 12 (channel A) and to terminals 13 and 14 (channel B).

The inductivity must be between 70 μH and 1,000 μH depending on the size of the loop in each instance.

Following the connection of the loop, a RESET procedure must be carried out (balancing with a maximum of 15 seconds). Following a power failure, balancing is carried out automatically.

Loop frequency

Using the DIP switches below the terminal strip 11 – 20, the frequency of the induction loops can be raised = "FH" or lowered = "FL" as required.

If several induction loops of different detectors are used close to one another, it is important to make sure that different frequencies are selected for each of the adjacent loops.

Loop sensitivity

Nine sensitivity levels can be set separately for the two channels using the two rotary switches on the front plate.

LED displays

The two LEDs indicate four different operating modes:

- Flashing light after putting the unit into operation, when the control unit balances itself following a RESET procedure.
- Continuous light in case of balancing of the induction loop, when a vehicle is on the loop.
- Flashing light during operation, when a possible loop error is present, or when the frequency is beyond the permissible frequency range.
- Alternate flashing light during operation, when one or both rotary switches are on test position "0".

RESET key

The RESET key must be pressed following each change of a switch position.

Presence relays A 1 and B 1

In case of vehicle presence on one of the two induction loops, the contact at terminals 5 and 6 (channel A) or at terminals 8 and 9 remains closed until the vehicle leaves the safety area (fully static). The response time is 150 ms.

Multifunction relays A 2 and B 2

Depending on the position of the three DIP switches on the front plate, various functions are assigned to the two relays A 2 and B 2. Accordingly, these two relays can function as additional presence relays or as pulse relays with the option of making an adjustment so that the pulse is released when entering the loop or when leaving it. A third possibility involves using the two relays to create a direction logic circuitry, i.e. one of the two relays is activated according to the order in which the two loops are driven over. Here too, a mode of operation as relay presence as well as pulse relay is possible.

Technical data :	Type	MID 2 A	MID 2 C	MID 2 E	MID 2 G
Voltage	V	230 AC	115 AC	24 DC	12 DC
Frequency	Hz	50	60	-	-
Power consumption	VA	6	6	6	6
Inductivity range	μ H	70 - 1000	70 - 1000	70 - 1000	70 - 1000
Response time	ms	150	150	150	150
Temperature influence	$^{\circ}$ C/h	30	30	30	30
Protection	IP	40	40	40	40
Weight	g	630	630	430	430

