

# MATRIX

Digital inductive loop detectors for vehicle access control and safety for **automatic gates, doors, parking barriers...**

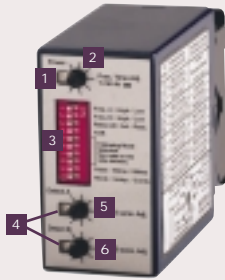
**MATRIX** is a high performance single or dual channel vehicle detector packaged in a compact housing with connection through an industrial 11-pin round connector.

- 1 **MATRIX** : single or dual channel detectors.  
Three power supply configurations (110, 220 V AC and 12-24 AC/DC)
- 2 **MATRIX** : wide sensitivity with continuous adjustment
- 3 **MATRIX** : separate sensitivity settings in case of dual channel
- 4 **MATRIX** : continuous setting of the presence up to unlimited time
- 5 **MATRIX** : careful compensation of outside temperature to guarantee a safe detection in case of long term occupation of the loop
- 6 **MATRIX** : up to four frequency settings to avoid any crosstalk between adjacent loops
- 7 **MATRIX** : Automatic Sensitivity Boost to track the presence of high-bed vehicles
- 8 **MATRIX** : direction sensing feature of dual channel detector
- 9 **MATRIX** : free selection of presence and pulse outputs
- 10 **MATRIX** : ease of use through fine adjustments by potentiometers

## Why does **MATRIX** look different ?



## DESCRIPTION



- 1 power on
- 2 presence time potentiometer
- 3 dip switches
- 4 detection state LEDs
- 5 6 sensivity adjustment potentiometers

# BEA

We open up New Horizons

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## PRODUCT RANGE

MATRIX-S110	Single channel detector 110 V AC
MATRIX-S220	Single channel detector 220 V AC
MATRIX-S12-24	Single channel detector 12 to 24 V AC/DC
MATRIX-D110	Dual channel detector 110 V AC
MATRIX-D220	Dual channel detector 220 V AC
MATRIX-D12-24	Dual channel detector 12 to 24 V AC/DC

## TECHNICAL SPECIFICATIONS

Technology	Inductive loop
Tuning	Automatic
Detection mode	Presence
Presence time	1 min to infinity (permanent presence) with 250 steps
Pulse time output	100 ms or 500 ms
Inductance range	20 to 1000 $\mu$ H
Frequency range	20 to 130 kHz
Frequency steps	Single channel : 4 / dual channel : 2 (each loop)
Sensitivity ( $\Delta$ L/L)	0,005 % to 0,5 % in 250 steps
Reaction time	Single channel : 25 ms / dual channel : 50 ms (each loop)
Setup time at power on	8 sec. max by channel
Power supply (depending on model)	12-24 AC/DC $\pm$ 10% 230 V AC $\pm$ 10% 115V AC $\pm$ 10%
Mains frequency	48 to 62 Hz
Power consumption	< 2,5 W
Temperature range	-30° C to +70° C
Degree of protection	IP 40
Output	2 output relays (free potential change-over contact) • max contact voltage : 230 VAC • max contact current : 5A (resistive)
LED indicators	1 green LED : power 1 red LED : channel 1 status 1 red LED : channel 2 status
Protections	Channel insulation transformer Zener diodes Gas discharge clamping
Connection	Standard 11-pin round connector 86 CP 11
Dimensions	77 mm (high) x 40 mm (wide) x 75 mm (deep)
Weight	< 200 gr
Immunity	Electromagnetic compatibility (EMC) according to 89/336/EEC and its amendments
Compliance	UL

## APPLICATIONS



## BEA PRODUCTS



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