# **MATRIX 1**

# UL LISTED US DUAL CHANNEL LOOP DETECTORS





















### PRIMARY APPLICATIONS







## DESCRIPTION

BEA's Matrix 1 provides vehicle detection via a single or dual loop. It may be used for entry, safety and exit loop detection.

The Matrix 1 is able to detect vehicle presence with pulse on entry and pulse on exit. It has two output relays and a US wiring configuration. Different power supply options available, including 110 to 120 VAC and 12 to 24 VAC/DC.

This loop detector features failsafe open, failsafe closed and automatic boost sensitivity. The unit has the ability to fine-tune both presence detection time and inductive sensitivity via two easy-to-use potentiometer adjustments.

The Matrix 1 is a dual loop, dual input detector, which allows independent detection of Loop A and Loop B. This is advantageous in vehicle directionality and sequencing applications.

# FEATURES & BENEFITS

- **UL Listed**
- Available in operating powers of 110 to 120 VAC and 12 to 24 VAC/DC
- Two output relays
- Convenient US wiring configuration
- Automatic boost sensitivity
- Failsafe open and failsafe closed
- Ideal for vehicle directionality and sequencing applications
- Settings are adjusted via two easy-to-use potentiometers
- Pulse on entry and pulse on exit presence detection



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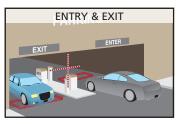
Customer Service: 800.523.2462 Technical Support: 800.407.4545

#### APPLICATIONS









#### TECHNICAL SPECIFICATIONS

<b>GENERA</b>	L SPECIFI	CATIONS
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Wiring	US wiring configuration
Connector	11 pin male (86CP11)
Detection Modes	Presence, pulse on entry, pulse on exit
Detect Frequency Adjustments	8 settings, variable settings from 20 KHz to 130 KHz
Inductive Range	20 - 1,000 mHenry
Setup Time (after power up/configuration)	Approx. 8 s, 2 sec/channel
Relay	Dual Relay
Maximum Contact Voltage	5 amps @ 230 VAC
Pulse Time Output	100 ms to 500 ms
Sensitivity (ΔL/L)	0.005% to 0.5%
Temperature	-22°F - 158°F
Features	Failsafe open, failsafe closed, automatic boost sensitivity, learn mode upon power up
Display	Power LED, 2x Detect LED (single, dual)
Norm Conformance	IP40, CE Listed, UL Listed and ANSI 156 compliant
Weight	7 oz
Dimensions	1.5 in x 3 in x 3 in

#### 10MATRIXD110

Power	110 - 120 VAC
Loop Configurations	Dual (2 loop inputs)
Reaction Time	50 ms

# 10MATRIXD1224

Power	12 - 24 VAC/DC
Loop Configurations	Dual (2 loop inputs)
Reaction Time	50 ms

#### DIMENSIONAL DRAWINGS

# 10MATRIXD-110 10MATRIXS-110 3 in 3 in 3 in 3 in 1.5 in

# RELATED PRODUCTS

1.5 in



10MATRIXD110 110-120 VAC, **DUAL LOOP** DETECTOR



10MATRIXD1224 12-24 VAC/DC, **DUAL LOOP** DETECTOR



10MATRIXIIS110 110-120 VAC, SINGLE LOOP DETECTOR



10MATRIXIIS1224 12-24 VAC/DC, SINGLE LOOP DETECTOR



10PS12-24D 110-12 OR 24 VDC **POWER SUPPLY** 



10MATRIXHARN 11 PIN **HARNESS** 



70.0262 11 PIN SOCKET BASED DIN RAIL

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