

625X Inductive Loop Detector

The Model 625X inductive loop detector from Oriux is designed for the parking and access control markets. After more than 40 years in the traffic control industry, Oriux's Model 625X detector is the latest in the company's long line of reliable, full-featured detectors. Time-tested detection techniques combined with state-of-the-art manufacturing result in a compact unit that offers increased performance and compatibility with existing equipment.

The 625X detector is a single-channel inductive loop vehicle detector that provides vehicle presence information required by gate operators, ticket spitters, card readers, etc. Although compact and lightweight, the 625X is designed to operate in the most demanding high volume access control installations in all environmental conditions. The 625X detector does not sacrifice features for the evolutionary reduction of size.

Two outputs are available: one to provide the presence of a vehicle over the loop, the second is switch selectable to provide pulse on entry of the loop, pulse on exiting the loop, a second presence output or a loop fault output. Easy to use front panel slide switches provide positive identification of frequency and sensitivity settings.



Features & Benefits

- Small size 3"H x 1.5"W x 2.8"L (76 x 38 x 71 mm)
- Failsafe or failsecure outputs
- Four selectable sensitivities
- Second relay is output mode selectable
- Pulse on entry and exit
- Second presence output
- Loop fault output
- Current and historical loop fault indicators
- Galvanic separation of loop and detector electronics
- Compatible with existing equipment
- Automatic tuning
- Constant readjustment of frequency to avoid environmental impacts
- Advance settings via software
- USB interface for modern diagnostic and service software
- Automatic system adjustment directly after power on
- Basic settings easily adjustable with DIP switches

Area of Application

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

Specifications

Supply Power 10-30 V AC/DC, max. 1.0 VA 100-240 V AC, 50-60 Hz, max. 2.0 VA.

Relay 2 Output Relay 2 Control switches Output 2 (SW4) and Edge 2 (SW3) are on the front side

SW4 SW3
OFF + OFF = Pulse Output on Entering the loop
OFF + ON = Pulse Output on Leaving the loop
ON + - = Second Presence Output

Sensitivity Sense a (SW8) and Sense b (SW7) on the front side.

SW8 SW7 (% sensitivity in df/f)
OFF + OFF = LOW (0,64%)
ON + OFF = MED LOW (0,16%)
OFF + ON = MED HIGH (0,04%)
ON + ON = HIGH (0,01%)

from The entire range of sensitivity adjustment

0.01% ... 2.55% df/f is possible with the diagnostic program Detector Tool.

Frequency Setting One of two operating frequency ranges can be selected with the front panel slide switch to eliminate cross talk, SW6 off for low, on for high.

Hold Time SW5

OFF	5 Minutes
ON	Infinite

Reset The Reset button must be depressed for one seconds for automatic retune, and 5 seconds for factory settings.

Loop Fault Indicators	Red	Blue	Function
	OFF	OFF	No supply voltage
	OFF	Fast Flashing	Calibration/Retuning Loops
	OFF	ON	Ready for operation, free
	Loop		Ready for operation, active
	ON	ON	Loop Fault
	Loop		Historical Loop Fault or
	ON	OFF	Switch Setting overwritten by USB
	x	Flashing	
	DIP		
	Blinking	Blinking	Output Loop Frequency in kHz

Presence Time 60 minute standard Options: 8, 16 minutes, or permanent.

Dimensions 3"H x 1.5"W x 2.8"L (w/o connector).

Detector Fail Secure Default setting when loop fails is detect state. You can change this via USB. SW1 and SW2 inverts the output signal for Relay1 or Relay2.

Inductance 20 to 700 µH, recommended 100 to 300 µH

Frequency Range 30 to 130 kHz

Temperature Range -35°F to +158°F (-37°C to +70°C)

Outputs Presence and Relay2 are changeover relay contacts rated at 230VAC, 2A, 60W/125VA max.

Lightning & Transients protection **Power supply** 10-30 V AC/DC - protected with Zener diode and Varistor 100-240 VAC - protected with Varistor

Loop supply Loop inputs are protected with Zener diodes.

The Detector has no connection to earth.

Connections

Pin	Function
1	AC Live (DC Positive)
2	AC Neutral (DC 0V)
3	R2 Pulse N.O.
4	No Connection
5	R1 Presence Com
6	R1 Presence N.O.
7	Loop
8	Loop
9	R2 Pulse Com
10	R1 Presence N.C.
11	R2 Pulse N.C.

Contacts are shown in the "NO VEHICLE PRESENT" condition with power applied and loop connected to the detector.

More Settings or more detailed settings can be done via USB interface with the service program.