

T-Rex InfraRed Exit Detector with Timer Module Relay



The T-Rex Infrared Exit Detector Kit is a great solution for hands-free exit control in turnstile and gate access control applications.

By combining a precision infrared request-to-exit detector with a configurable timer relay module, the system delivers reliable, momentary output signals required for proper turnstile operation.

Turnstile Integration

The T-Rex detector must be used in conjunction with a timer relay module for proper turnstile or gate control.

The detector triggers the relay, which outputs a momentary signal (~1 second) to the turnstile exit input, ensuring consistent and reliable operation.

Key Features & Benefits

- Hands-free exit detection (no push buttons required)
- Adjustable infrared detection zone
- Horizontal and vertical targeting control
- Reduces false alarms with DSP filtering
- Compatible with access control and turnstile systems
- Reliable momentary signal output via timer relay

System Overview - How It Works

1. User approaches exit area
2. T-Rex detects motion via infrared field
3. Detector triggers timer relay module
4. Relay outputs a momentary signal (~1 second)
5. Signal activates turnstile exit input





T-Rex

Request to Exit Detector

Features That Make a Difference:

- Accurate and adjustable detection zone
- Horizontal and vertical adjustment
- Unlocks or shunts door automatically
- Hands-free, no buttons to push

The Smart Exit Detector

T-Rex provides a complete solution to exit detection and door surveillance for access control applications. Outstanding innovations such as horizontal and vertical Detection Zone Targeting and DSP (Digital Signal Processing) make T-Rex the fastest and most reliable exit detector on the market today.

Horizontal and vertical targeting adds an extra layer of security by adjusting the detection zone. The detection area of the

T-Rex can be adjusted so that it will not “hit” the floor along the doorjamb, defeating any attempt to circumvent door supervision by sliding objects under the door.

In addition, it uses infrared detection coupled with DSP sampling to allow the T-Rex to accurately detect exits and prevent false “Door Forced Open” alarms.

Simple Installation:

1. Choose Location
 - Recommended locations include door header, wall or ceiling.
 - Ensure clear line of sight from detector to every part of detection area.
 - Detection zone pattern is down and away from door (to inhibit tampering).
 - Do not place detector directly across from a window
2. Adjust
 - Can be adjusted to detect an individual either in front of door or several steps away from door.
 - Detection zone span and target direction is set by turning louver direction screws.

General

Detector Type	Passive infrared
Filter Technology	Digital Signal Processing (DSP)
Detector Lens	Curtain-type Fresnel lens
Detection Range	
Narrow Targeting Area	3 m (10 ft)
Whole Body	6 m (20 ft)
Piezo Buzzer	90 dB at 28 VDC, 5-28 VDC, 20 mA (XL & XL2 only)
Main Relay Contacts	SPDT, 1A max @ 30 VDC max
Main Relay Timer	Adjustable, 0.5 to 60 seconds
Main Relay Recycle Timer	Fixed, 0.75 seconds off
Lock Control Relay	Available on LT2 and XL2 models only, solid-state relay, N.C., 2A max @ 30 VDC, timed at 2 seconds fixed
Tamper Switch	N.C., 100 mA max @ 30 VDC max
Indicator Light	Red/Green LED
Mounting	Optional backplate available for mounting the T.REX on a standard single-gang electrical box

Physical

Dimensions (H x W x D) 4.5 x 19 x 4.75 cm
(1.75 x 7.125 x 1.875 in)

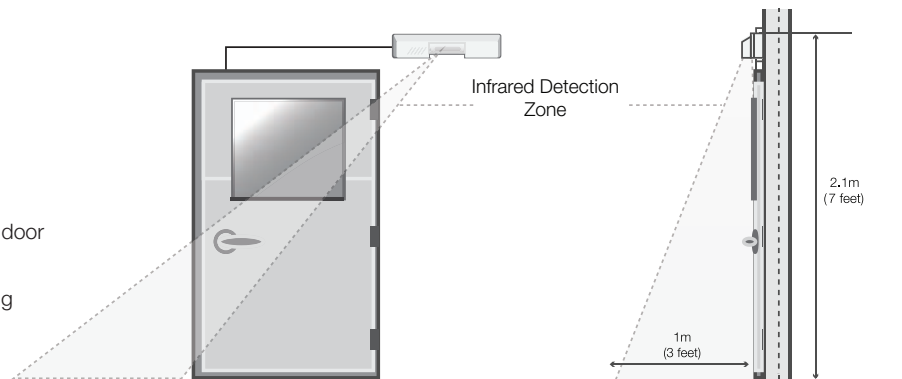
Electrical

Power Consumption 12-28 VDC, 50 mA

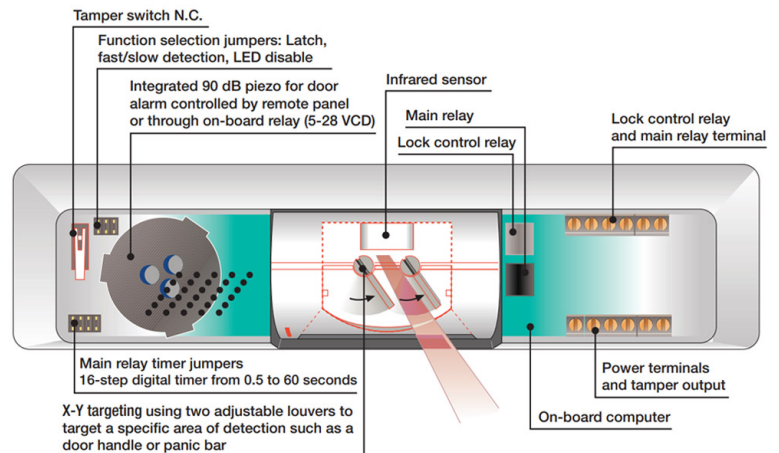
Regulatory

Certifications UL294, CE, FCC, ULC

Installation and Detection Pattern



Product Diagram



Multipurpose Timer with Selectable Relay Activation

The programmable timer is suitable for many functions that require a timed operation e.g. Access Control Applications, Siren/Bell Cut Off Module, Dialer Delay, Guard Tour Supervisory Timer, etc. Some optional functions include: One Shot, Delayed Release, Delayed Operate, Delayed Pulse, and Pulsar/Flasher.



Specifications

Input

Voltage	12VDC or 24VDC selectable
Current Draw	Stand-by: 3mA, Relay energized: 40mA.

Relay

Contact Rating	8A/120VAC or 28VDC contacts
Selectable relay activation at the start or end of the timing cycle	
One (1) second momentary relay activation at the end of the timing cycle (eliminates the need to use two timers for this function)	

Timer

- Triggers via positive DC (+) voltage, dry contact closure or removal of contact closure.
- Quick and extremely accurate time range adjustment from 1 second to 60 minutes.
- Built-in reset feature cancels timing cycle
- Repeat (flasher/pulse) mode

Indicators (LED)

Red	Indicates relay is energized.
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Physical and Environmental

Dimensions (L x W x H)	3" x 2.5" x 0.75" (76.2mm x 63.5mm x 19.05mm)
Product Weight	0.1 lb. (0.05 kg).
Shipping Weight	0.15 lb. (0.07 kg).
Temperature	
Operating	-20°C to 49°C (-4°F to 120°F)
Storage	-25°C to 70°C (-13°F to 158°F)
Relative Humidity	85% +/-5%.

Board Dimensions (L x W x H) and Drawing

3" x 2.5" x 0.75" (76.2mm x 63.5mm x 19.05mm)

