

# Short Range Sensor M75-VPR27-0015



TARGETED ACTIVATION | REDUCED UNNECESSARY FLASHING | SOLAR SYSTEM FRIENDLY  
*Automatic Crossing System Activation Trigger*

## Movement-Activated Trigger for Flashing Crossing Systems

TraffiCalm's Short-Range Crossing Activation Sensor is a radar-based trigger device used to activate flashing crossing warning systems when movement is detected within a designated crossing approach area.

The sensor monitors the sidewalk or trail approach to a roadway crossing and provides an automatic activation signal to the controller. This allows warning devices to operate when crossing activity is occurring, while minimizing unnecessary operation during inactive periods.

By limiting system operation to movement events within the crossing zone, the device helps improve driver awareness and reduces power consumption compared to continuously operating warning devices.

The sensor integrates directly with TraffiCalm controllers and functions as a standard contact-closure activation input.

### Application

The sensor is intended for crossings where users may not reliably activate push buttons or where hands-free operation is desired.

Typical locations include:

- Shared-use paths
- Trail crossings
- School crossings
- Mid-block crossings
- Rural highway crossings
- Locations requiring passive activation

The system does not require user interaction and operates automatically when movement occurs within the detection zone.

### Key Advantages

#### Passive Activation

Provides automatic system activation without requiring a push button or user interaction.

#### Reduced Unnecessary Operation

The warning system activates based on movement in the crossing approach rather than operating continuously.

#### Solar System Efficiency

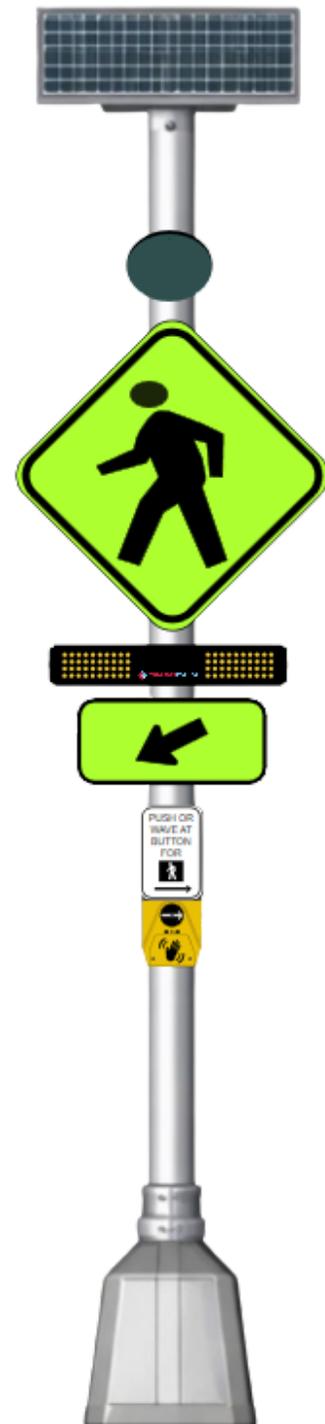
Event-based activation reduces overall runtime of flashing devices, helping maintain battery performance in solar powered systems.

#### Retrofit Friendly

Mounts to existing sign posts and integrates into TraffiCalm flashing sign controllers.

#### All-Weather Operation

Designed for outdoor roadway environments including dust, moisture, and temperature extremes.



Exclusions Apply, see warranty statement for details

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## Detection Characteristics

Detection Method: Doppler microwave motion sensing  
 Operating Frequency: 24 GHz band  
 Detection Modes: Approach, Depart, or Bi-Directional

Typical Detection Range:

- Up to approximately 60 ft (human-scale movement)
- Up to approximately 80 ft (bicycle or larger movement)

Detection Field:

- Horizontal beam: ~18°
- Vertical beam: ~9°

Typical response time: 0.2 seconds

The sensor detects movement within the configured zone and provides a relay contact closure to the controller input.

## Electrical Interface

Power Input: Supplied by controller radar port  
 Operating Voltage: 12–24 VAC or DC  
 Current Consumption: ~75 mA  
 Output Type: Relay contact closure  
 Controller Interface: Dry contact activation input  
 Isolation: Dry contact relay output (no voltage provided by sensor)

Operation:

When movement is detected, the relay closes and initiates the flashing sequence.  
 The sensor functions as a Form A (Normally-Open) relay contact

## System Integration

Compatible with TrafficCalm flashing sign controllers.  
 Interface Type: Dry contact trigger input  
 Power Source: Controller radar port  
 Cable: 15 ft integrated harness (TrafficCalm supplied)

## Physical Characteristics

Mounting: Pole mount bracket  
 Dimensions: Approximately 7.5 in × 6 in × 5.5 in  
 Weight: Approximately 1.55 lb  
 Recommended Mounting Height: 10–20 ft above grade

## Environmental

- Outdoor-rated enclosure suitable for roadway environments
- -35° F to 165° F operating range (-37° C to +75° C)

## Regulatory

FCC Part 15 compliant  
 Industry Canada compliant

## Adjustable Parameters

Installer configurable:

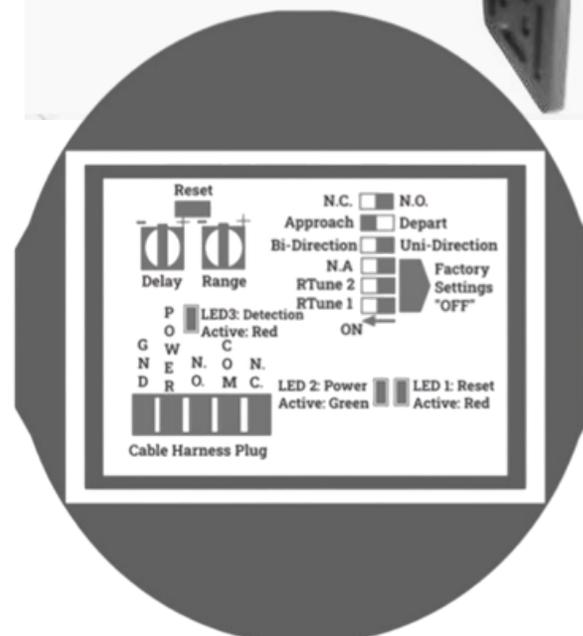
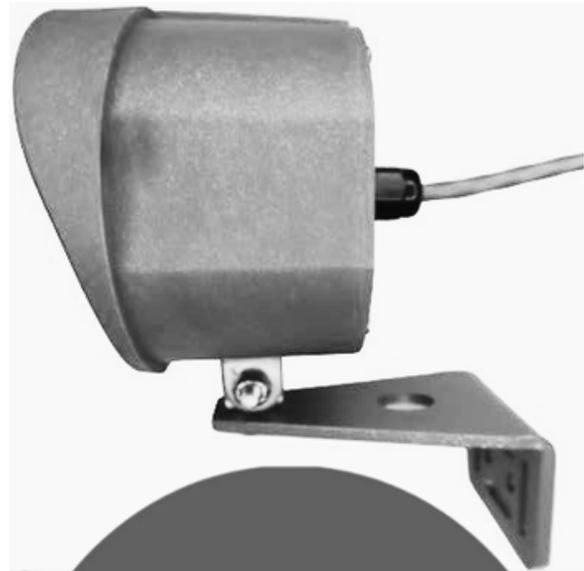
- Detection range
- Detection direction (approach / depart / bi-directional)
- Relay hold time (0.25–25 seconds)

## Warranty

- Warranty: 5-year limited
- Support: Unlimited U.S.-based factory technical support

## Part Number

- M75-VPR27-0015



\*Device detects motion within a configured zone and is not a user-classification detector. Activation may occur from any movement within the detection area. Proper aiming is required.