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# **Vehicle Detection Manual V3**

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# Vehicle Detection Manual

## Table of Contents

System Features and Setup .....	1
Vehicle Detector Board Adjustments .....	1
Installation Instructions.....	2
Board Connections & LEDs .....	3
Troubleshooting the LED Status.....	4
Vehicle Detector Board Illustration for TT .....	5
Vehicle Detector Board Mounting Option Illustration for TT.....	6
Control Board Illustration.....	7
Wall Mount Position and Dimension.....	8



## **System Features and Setup**

The Bavis vehicle detection system can be installed with a Photo Eye (PE), or similar, Normally Open Contact type sensor. On the vehicle detector control board, there are both visual and audible indications of the presence of a vehicle. The visual indicator is a high visibility red LED, which stays on as long as a vehicle is present. The audible indicator is a chime tone audio alarm, which sounds when a vehicle is present and will not sound again until the vehicle leaves and another is detected. The Control Board has four adjustable potentiometers (pots) that control the alert chime.

R1 will control how long the sensor must be tripped (On), before it will chime. This pot can be set so that the chime will not sound if a person or animal passes through the sensor.

R2 controls how long the sensor's signal must be Off before the next On signal will trigger the chime. This pot can be adjusted so that, if there is a line of vehicles, the chime does not sound when the sensor sees the gap between the vehicles.

R3 controls how many times the chime sounds when it is triggered. It can be adjusted for a single chime, up to four chime tones. This is helpful at sites that have more than one Detection System, to signal which lane has vehicle, or in noisy environments where a single chime might be missed. R4 controls the volume level of the chime, so it can be heard, but, is not so loud that it is annoying.

The Control Board has a port for easy connection to the P/N 02969992 – Fabaflasher II w/Mounting Plate. With this addition, a second Chime with LED can be installed at a remote position in the facility.

## **Vehicle Detector Board Adjustments**

Drive-thru that is equipped with this Vehicle Detection System will require proper setup to function properly. The first step is to insure that the Sensor is correctly positioned and that an appropriate sensitivity level has been set, if this feature is adjustable.

There are four potentiometers (pots) that can be adjusted:

R1 – Controls the amount of time the sensor must be ON before the board will chime.

R2 – Controls how long the sensor must be OFF before the board will chime again.

R3 – Controls how many times the chime will ring when it is activated, (1 to 4 chimes).

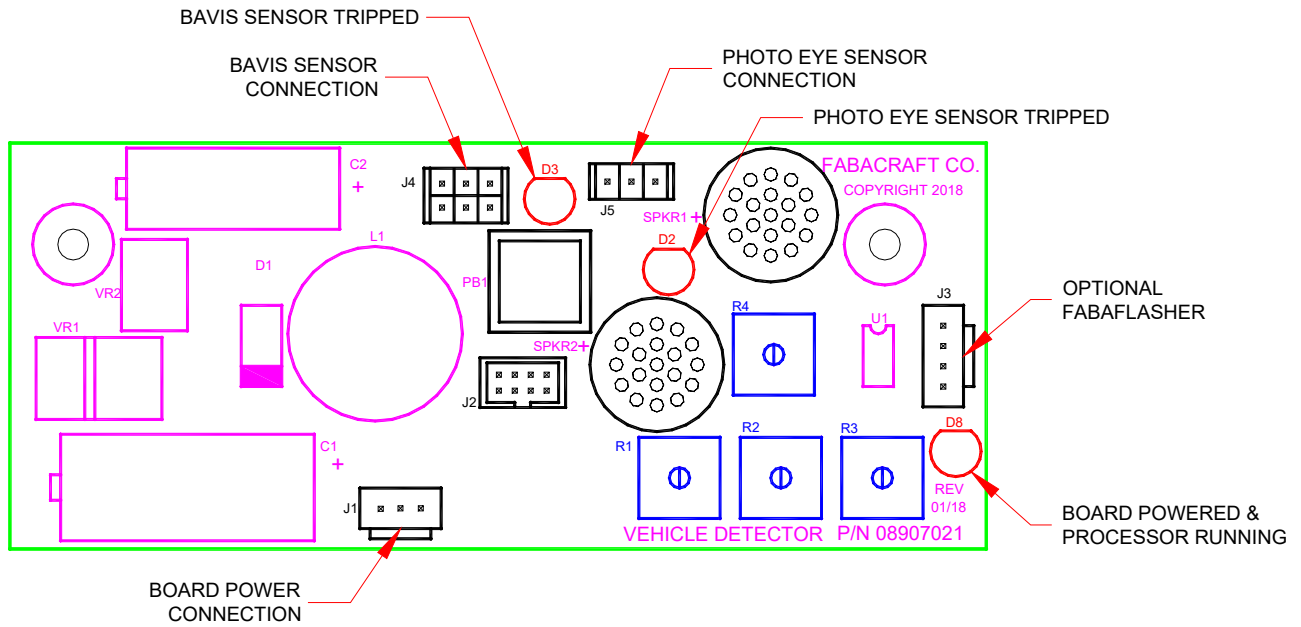
R4 – Controls the Volume of the chime tone.

## Installation Instructions

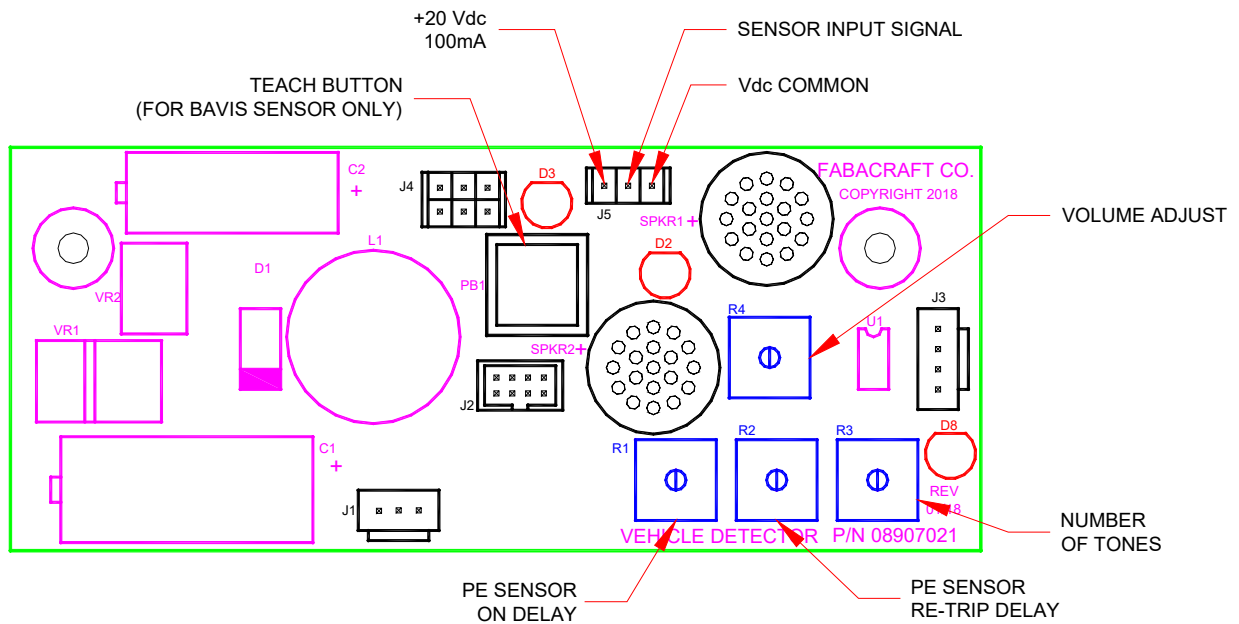
The following instructions assume that a Photo Eye type sensor is being installed on an exterior wall, near a drive-up window. When mounting in another application, only certain steps will apply. In mounting the sensor to anything, the centerline of the sensor should be between 16" and 24" above the driveway surface.

1. Measure and mark the location of the sensor.
2. Using a center punch, mark only the locations for the mounting bracket and wire chase holes.
3. Drill a pilot or anchor sized hole for an appropriate sized mounting screws.
4. Drill the wire chase hole to 5/8" diameter.
5. From inside the building, feed the connecting cable through the 5/8" hole to the outside of the building.
6. Attach the sensor assembly to the connecting cable.
7. Attach the sensor assembly to the wall with the appropriate screws, feed the cable back into the wire chase hole, and/or cover and seal to the wall.. **Note: When running the cable inside the building, be sure to leave enough slack near the wire chase so that the cable connector can be pulled to the outside of the building for servicing the sensor.**
8. Find a suitable location for the control assembly, and remove the case top. **Note: Make sure the location that you choose is close to a 110-120VAC outlet for the power pack to plug into.**
9. Feed the connecting cable through the chase hole in the control assembly case, and the wire tie inside the case, and plug into the control board (see page 10).
10. Secure the connecting cable.
11. Plug the power pack into the jack in the top of the control assembly case, and secure with the wire tie provided (see page 10).
12. Using the wire ties and mounting blocks provided, secure the excess connecting cable.
13. Plug the power pack into the outlet.
14. Set the sensor sensitivity (follow instructions on page 1).
15. Re-install the case top.

## Board Connections & LEDs



## Teach Button & Adjustments



## **Troubleshooting the LED Status**

### **Control Board LEDs**

With Photo Eye – (D2) – Red

On – Vehicle Present

Off – No Vehicle Present

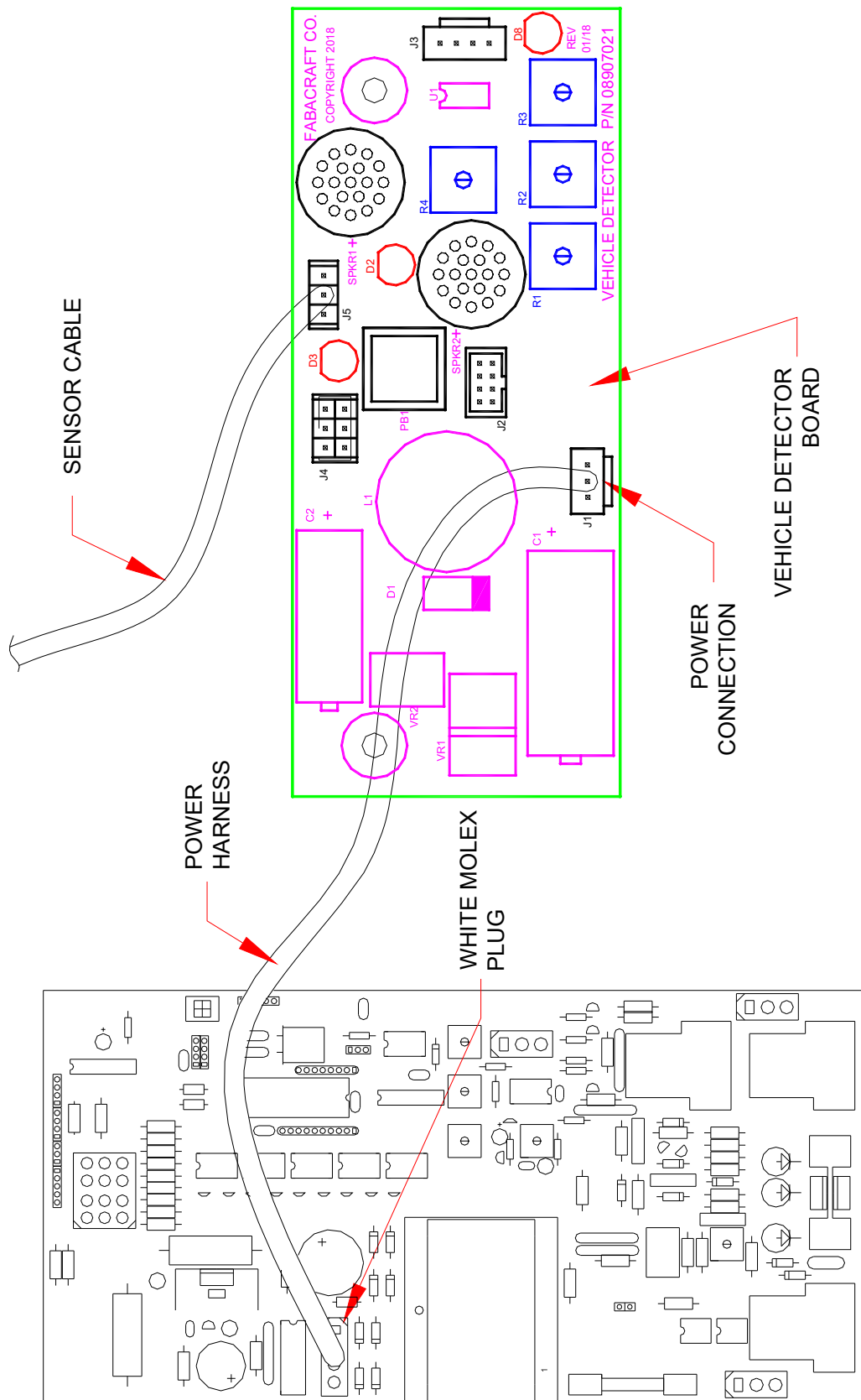
Power / Processor Running – (D8) – Red

Blinking – Board has Power and the Processor is running. If the Sensor has been tripped, (D2, or D3 is on), blinking will stop until the Sensor is cleared and the delay timers have run out their pre-set time and have reset.

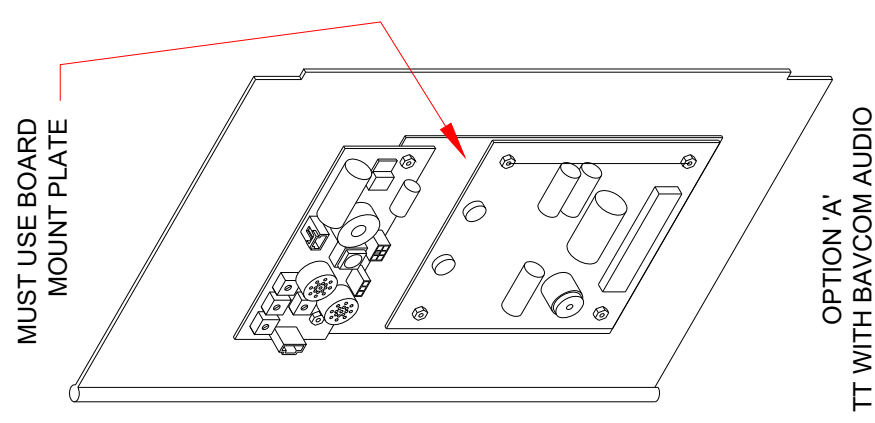
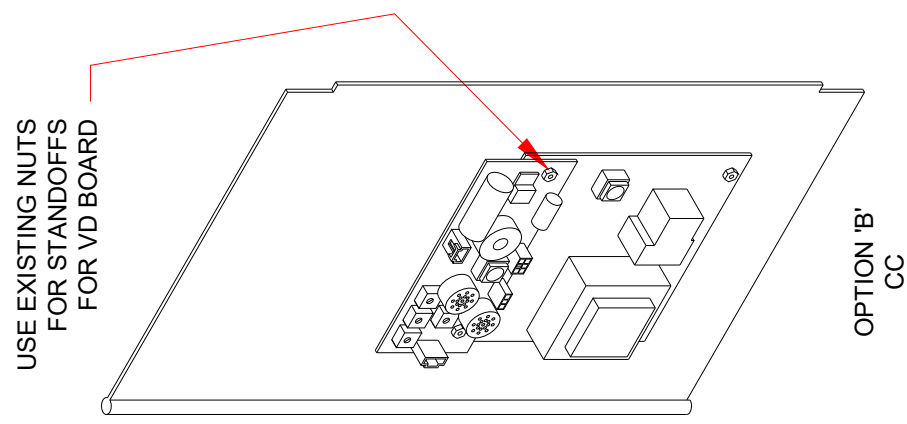
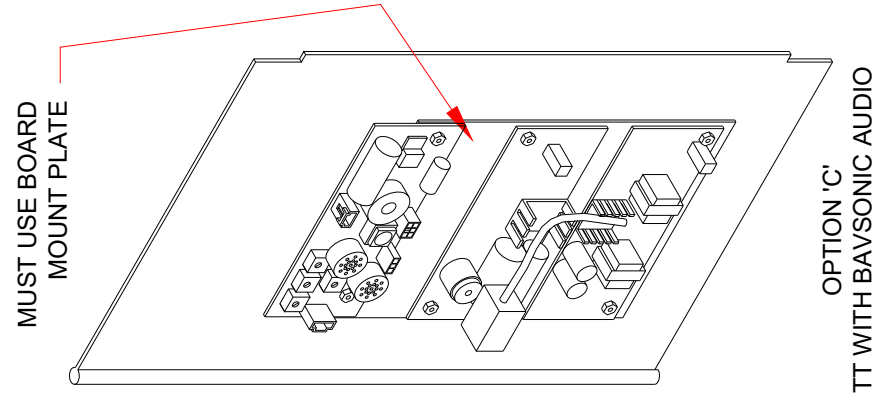
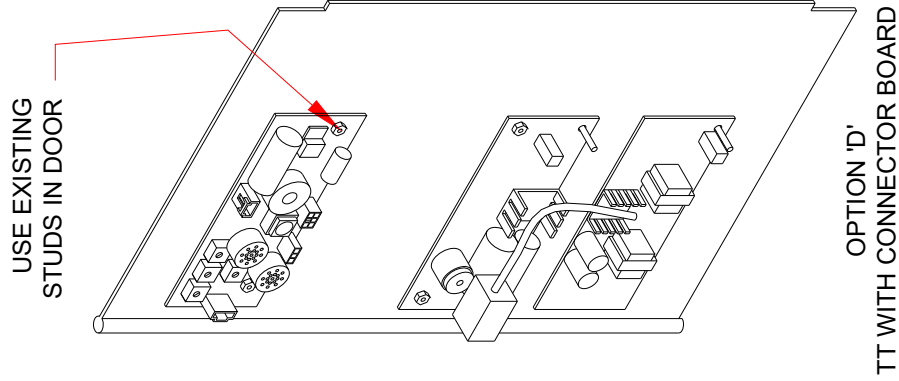
If you have any questions, please contact the factory at 1-800-937-3322



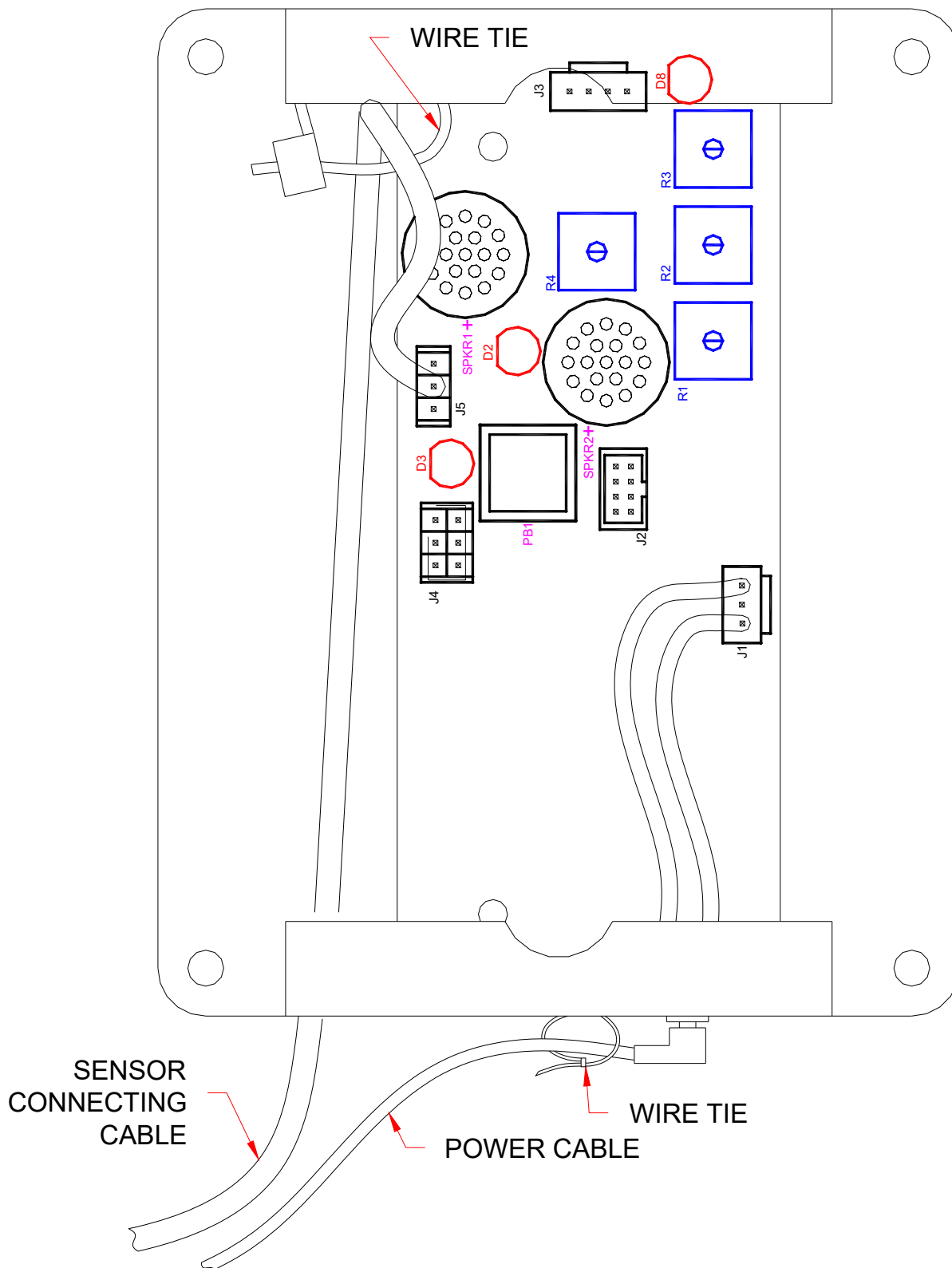
# TransTRAX Mounted Vehicle Detector Board Illustration



# TransTRAX Mounted Vehicle Detector Board Mounting Option Illustration



# Control Board Illustration



## Wall Mount Position and Dimension

