

## 0966-0006 / 0966-0007 Installation Instructions

The Low Mount Vehicle Present Sensor is designed for transport vehicle detection at the loading dock. The sensor communicates when a transport vehicle arrives or departs and provides valuable loading dock analytics when paired with MyQ Dock Management. It mounts on the building exterior, below a loading dock and attaches to a bracket that provides impact and weather protection. Two kits are available based on the application and include a straight or 90 degree cable connection. See **Figures 3 and 4**.

Review the installation instructions included with this kit to determine an appropriate mounting location.

### NOTICE

Concrete anchors for mounting the sensor bracket are included in this kit. Choose appropriate hardware based on the construction material of the building wall. (Metal, concrete, etc.)

### Install Mounting Bracket

1. Review the installation location. Plan ahead for potential sensor obstructions and determine effective cable routing. Based on objects on the dock face or junction box location, choose the straight or 90 degree cable accordingly.
2. The sensor mounting bracket must be oriented correctly to provide impact/weather protection. See **Figure 1** below. Note that the bracket can be rotated 90 degrees clockwise if the wire routing will go to the left of the bracket. See **Figure 2**.

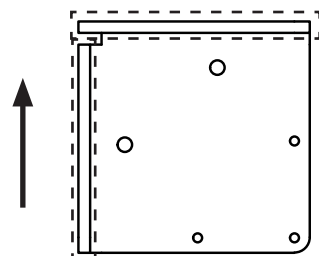


Figure 1

3. Position the bracket on the building wall (A), 30"-34" from the centerline of the dock (B) to avoid interference from vehicle restraints, And 20" from the ground. See **Figure 5**. If the sensor cannot be mounted within these dimensions, please contact Technical Services.

4. Ensure the bracket is plumb and level. Then mark the holes for the mounting hardware.
5. Drill one hole first. Then install an anchor in the hole. Verify the bracket remains level, then drill the remaining hole and install the second anchor.

### Mount the Sensor

1. Mount the sensor to the bracket using the included hardware. See **Figure 2** below:

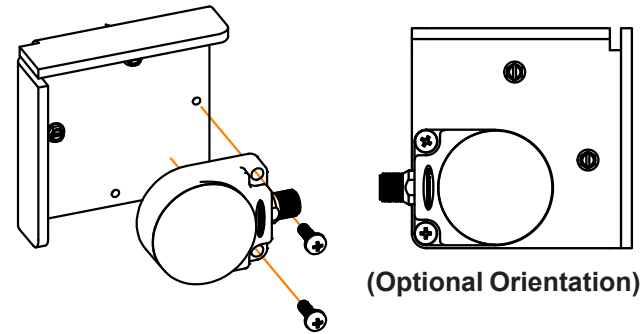


Figure 2

### Wiring Connections

#### DANGER

Make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

#### CAUTION

All electrical work — including the installation of the disconnect panel, control panel, and final connections to the pit junction box — must be performed by a certified electrician and conform to all local and applicable national codes.

1. Connect the cable to the sensor as shown in **Figures 3 and 4**.
2. Route the cable to the iDock Controller or iDock Link following all applicable local and national electrical codes. Connection instructions below:

Instructions continued on page 2.

### 0966-0006 - Straight Connector

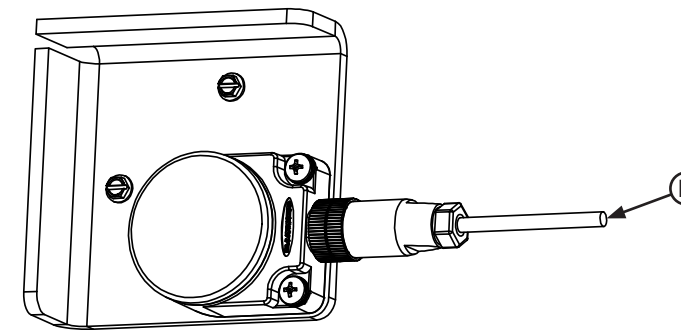


Figure 3

### 0966-0007 - 90 Deg. Connector

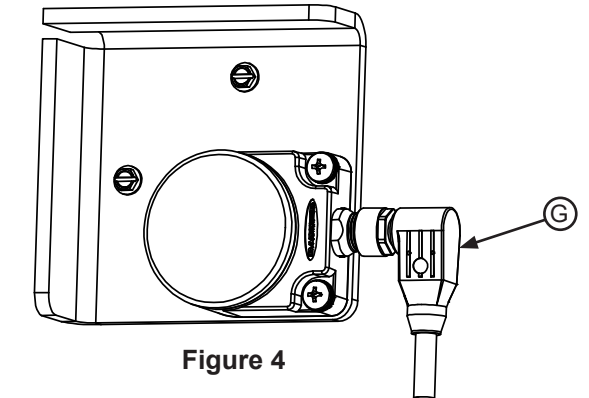


Figure 4

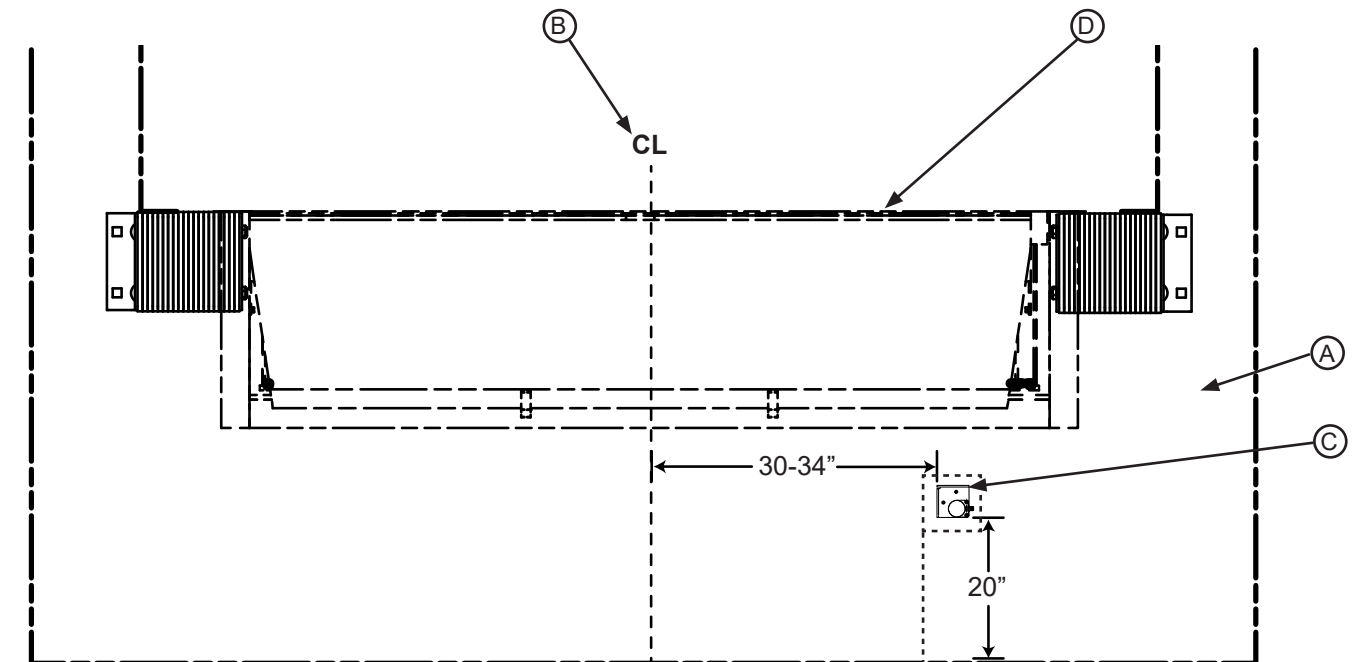


Figure 5

A — Building Wall  
B — Centerline

C — Mounting Bracket  
D — Dock Leveler  
E — Mounting Hardware

F — Straight Cable  
G — 90 Deg Cable

## Vehicle Present Sensor Installation

### Wiring Connections (Continued)

# NOTICE

When installing electrical controls in a temperature-controlled environment, the installer must determine an appropriate means to isolate/prevent thermal and vapor transfer through electrical conduit where conduit routing crosses temperature zones. Systems, LLC is not responsible for any damage due to moisture collecting inside the control panel caused by improper isolation/prevention of thermal and vapor transfer through the conduit. Refer to Tech Service Bulletin 19-053 for more information.

If you need assistance with installation or wiring, contact Technical Services using the information on the bottom of this bulletin.

Vehicle Present Sensors connect to an expansion board in the iDock controller or to an iDock Link. See connection instructions below:

#### iDock Wiring:

- Terminate brown wire on terminal block #20.
- Terminate blue wire on terminal block #21.
- Terminate black wire on expansion board:
  - Standard Expansion Board terminal #25
  - Mini Expansion Board terminal #2.




#### iDock Link Wiring:

- Terminate brown wire on 24VDC terminal.
- Terminate blue wire on 0VDC terminal.
- Terminate black wire on IN5 terminal.

#### Testing Operation

1. If the sensor was installed as a retrofit, and not with the original loading dock equipment installation, make sure the iDock System Configuration and Firmware have been updated.
2. After the wiring connections have been made, safely energize the equipment and test sensor operation.
3. Position on object with a flat surface approximately 4-5 inches from the sensor face and verify the following LED states to confirm operation.

#### LED States:

-  With the power on and no target detected, the BLUE LED is on.
-  When the sensor detects an object, the GREEN LED is on. However, the sensor is not yet sending a signal.
-  When the sensor detects an object and begins sending a signal, the two AMBER LEDs will turn on along with the GREEN.

4. After the sensor has detected a target and is sending a signal, there is a 15 second delay before the iDock controller will acknowledge a transport vehicle is present. This delay is to avoid sensor oscillation due to foot traffic or other objects passing by the sensor. After 15 seconds, verify the display shows the following:

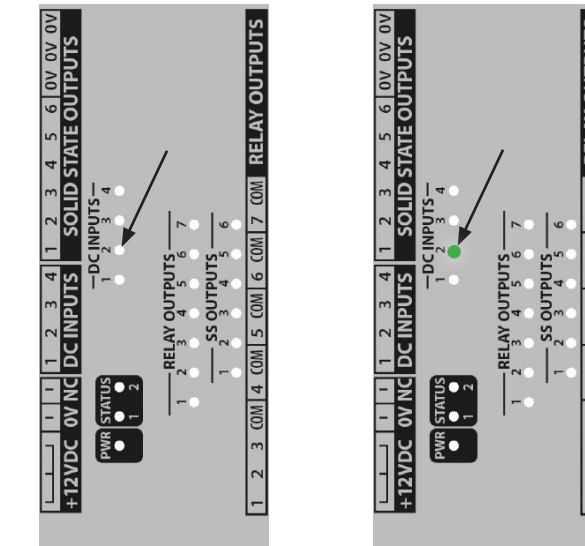
VEHICLE PRESENT

(Alternating Messages)

**Note:** As an option, the communication light on the iDock can double-flash when a vehicle is present.

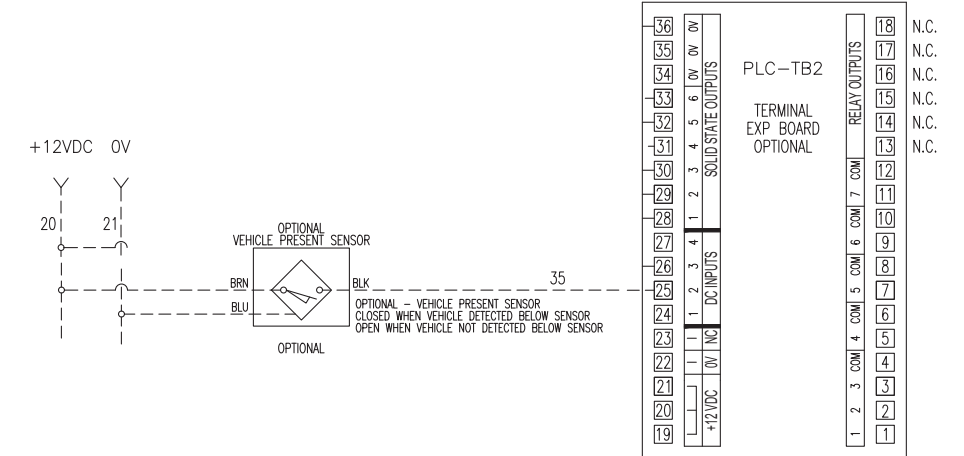
5. If the message display does not show the message above, verify that the corresponding input is illuminated on the expansion board or iDock link:
  - Standard Expansion Board - **Input #2**
  - Mini Expansion Board - **Input #2**
  - iDock Link - **Input #5**
  - See **Figures 6-8**.
6. There is a 15 second delay before the iDock controller will turn off the vehicle present notification, after a transport vehicle departs. Verify that the vehicle present notification disappears from the message display.
7. If the equipment is operating correctly, based on steps 1-5 above, the installation is complete. If you need assistance with the installation, contact Systems Technical Services.

#### Standard Expansion Board

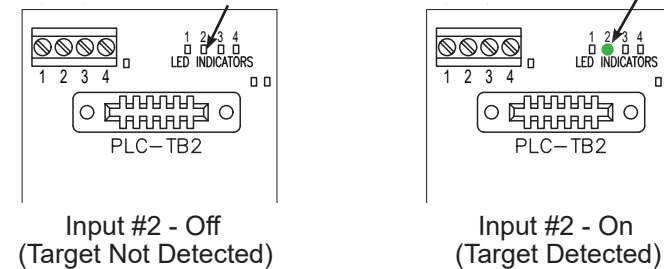


Input #2 - Off (Target Not Detected) Input #2 - On (Target Detected)

Figure 6

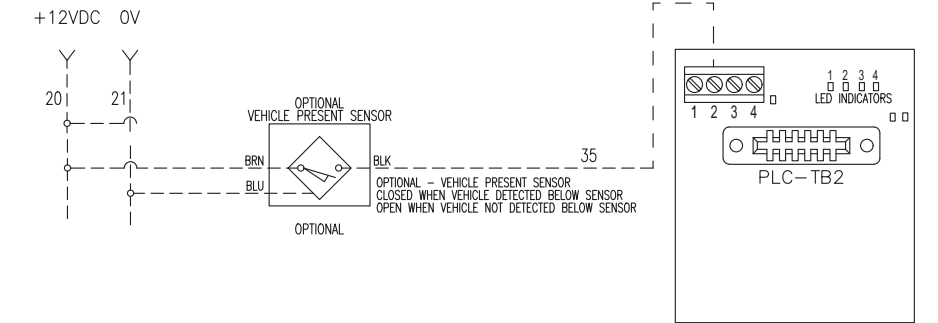


#### Mini Expansion Board

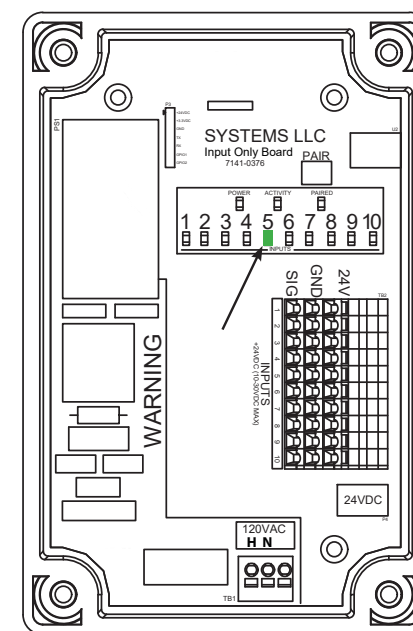


Input #2 - Off (Target Not Detected) Input #2 - On (Target Detected)

Figure 8



#### iDock Link



Input #5 - On (Target Detected)

Figure 7

