

Forklift Activity Sensor • Installation instructions

7155-0008 Installation Instructions

The forklift activity sensor uses a retro-reflective sensor for easy installation. The sensor mounts to a bracket or Track Guard below the iDock controller. A reflector mounts on the opposite side of the door opening.

This sensor allows the iDock to count the number of forklift cycles and log the time frame of the activity. This allows a user to monitor the timing and efficiency of their operations.

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

WARNING

Always post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the dock leveler before installation is complete.

A hard hat or other applicable head protection should always be worn when working under or around a dock leveler.

Always stand clear of platform lip when working in front of the dock leveler.

CAUTION

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

NOTICE

Ensure the chosen bracket location will not interfere with the door track or other building materials. Many facilities are built using precast walls, which contain embed plates. Select a location free of obstructions for hardware.

NOTICE

Hardware for mounting the sensor bracket is not included in this kit. Chose appropriate hardware based on the construction material of the building wall.

F.A.S. Installation - Via Wall Brackets

1. The sensor can be installed using the included mounting brackets (**A**), or with optional Track Guards.

Note: See Track Guard owner's manual if sensors are installed using Track Guards.

2. Choose a mounting location for the brackets (A) that will not interfere with the door track and provides an obstructed path between the sensor (B) and its reflector (C). See Figures 1 and 2.

Note: DO NOT mount the sensor bracket to the door track. Door tracks can move as the door changes position. This can negatively affect sensor alignment.

- Bracket position should avoid direct sunlight in applications where enclosed type vehicles are not the primary transport vehicle.
- · Bracket position should avoid potential damage caused by material handling equipment. The brackets can be mounted away from the door opening to avoid damage.
- · Bottom edge of bracket should be 18-22 inches off the dock floor. See Figure 2.
- 3. When the correct location is chosen, use the bracket as a template to mark the holes for the mounting hardware. Ensure the bracket is plumb and square with the building wall. Final adjustments may be required for sensor alignment.

Note: Mounting hardware is not included and will vary based on wall construction and material.

- 4. Mount the bracket using the chosen hardware. Verify that the bracket remains plumb and level.
- 5. Repeat steps 2-4 to mount the reflector bracket on the opposite side of the door opening.
- 6. Install the reflector on the mounting bracket using the included self-drilling screws.
- 7. Then install the sensor on the bracket beneath the iDock controller (D). Position the sensor so that its connector is parallel with the bracket and pointing toward the wall. See Figure 1.
- 8. Final alignment can be verified when power is applied to the sensor. Electrical connections are continued on page 2.





A — Mounting Bracket **B** — Retro-reflective Sensor

Instructions continued on page 2.

C — Reflector

D — iDock Controller

F.A.S. Installation (Continued)

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ACAUTION

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Electrical Connections

- 1. Secure the cable between the sensor and the iDock following all applicable local codes and site specific requirements.
- 2. Connect the cable to the iDock controller. Reference the included installation instructions for a wiring diagram, or see Figure 3. The connections to the iDock are as follows:
- Brown wire: connect to terminal block 20
- Blue wire: connect terminal block 21
- White wire: Not Connected.
- Black wire: connect to expansion board, terminal #26.

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 electrical connections have been made, safely energize the iDock Controller.
- With the power on and no forklift or other object in front of the reflector, both LED's should remain illuminated until an object breaks the beam.

Note: The amber LED should not be blinking. If the amber light is blinking, there may be an alignment issue or partial obstruction. Check for an obstruction and verify alignment.

• With the power on and an object in front of the reflector, only the green (power) LED should be illuminated.

Testing Operation (Continued)

- Monitoring the expansion board in the iDock controller, can also indicate if the sensor is working correctly. DC Input #3 should illuminate when there is no object in front of the reflector and turn off when an object is blocking the reflector. See Figure 4.
- 3. Verify that the iDock controller is counting the number of forklift cycles using the iDock menu. Press menu to enter the main menu.



System Control Buttons/Displays

- A Message Display
- B MENU button
- C ENTER button
- **D SCROLL UP/DOWN buttons**
- Use the down arrow to scroll to counters and press enter.
- Use the down arrow to find the screen below:



- The count should be a number above zero and continue to rise as the sensor is flagged.
- 4. Flagging the sensor will update the count. The beam must be broken for 1 sec or more to register.
- 5. If the equipment is operating correctly, based on steps 1-4 above, the installation is complete. If you need assistance with the installation, contact Systems Technical Services.







Input #3 - On (No Object Detected)



(Expansion Board)



Input #3 - Off (Object Detected)