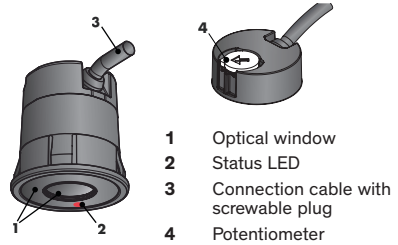
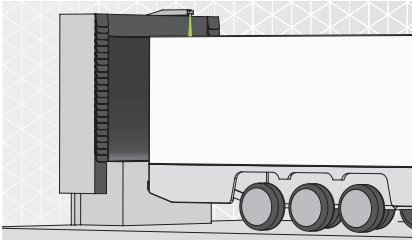


## ► Overview

The TOF/Spot-truck detection sensor has been developed to monitor the area in front of a loading dock. When a tractor trailer is parked in front of the loading dock door, the sensor provides a signal to hold the door open e.g. to allow for forklift traffic. As soon as the truck leaves the loading dock area, the sensor output changes state so that the door can be closed after the truck has driven away.



## ► Introduction

The TOF/Spot-truck detection sensor has an operating height of 6 m (19.6 ft). It uses Time-of-Flight technology to measure the distance to an object. When an object is detected within the trigger distance specified by the potentiometer, the output is switched. The sensor is able to detect all types of truck trailer surfaces, independent of their color or reflectivity. The sensor detects flatbeds as well as box trailers, thanks to its extended operating range.

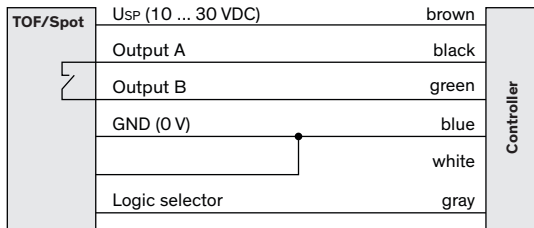
## ► Installation

The installation has to be carried out according to the following steps:

1. Mark clearly that door operator system is "Out of Service" and switch off main power.
2. Insert the sensor into the mounting housing. Do not attach the cover yet to the outdoor housing.
3. Using a mounting bracket or other suitable means, attach the sensor to the mounting bracket and then attach the mounting bracket to the mounting surface (e.g. wall).
4. Ensure that distance from the sensor to the wall is  $\geq 150$  mm (6 inches).
5. Attach the mating cable and then connect the sensor to the door operator per the operator's instruction sheet (see cable wiring below).
6. Switch on main power.
7. Adjust the potentiometer for the threshold desired (see next page).
8. Place cover on to outdoor housing.
9. Verify that the door operator system operates as expected.
10. Place the door operator system back into service.

## ► Electrical connection

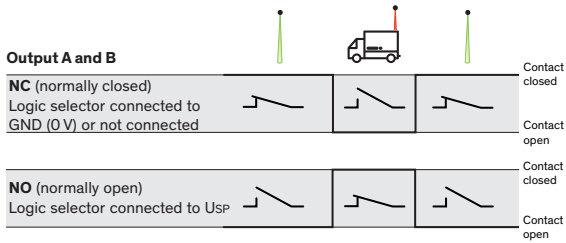
Connect the TOF/Spot-truck detection as follows to the control unit of the loading dock.



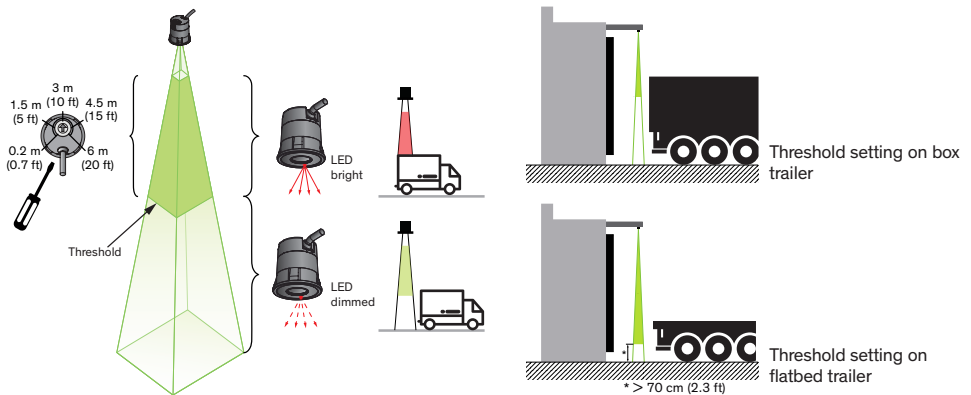
### Important:

- Output A and Output B are interchangeable
- Unconnected (n.c.) wires must be separated and isolated

► **Logic selector**



► **Detection range setting with potentiometer**



► **LED status**

LED status	Description
LED off	No power
LED dimmed red	No object detected
LED bright red	Object detected or test active

► **Timing**

	Value [ms]
Power-on time	1,000
Response time	≤ 60
Release time	≤ 60

► **Application recommendations**

Objects must interrupt the complete cross-section of the beam to be detected properly. If an object only partially interrupts the beam's cross-section, a correct distance evaluation cannot be guaranteed. The truck may not be detected.

Maximum mounting height from ground is 8 m (26.2 ft).

**Note:** For 8 m height, the truck trailer would need to be ≥ 3 m (9.8 ft) high in order to be detected.

► **Information**

The complete TOF/Spot operating manual is downloadable from the CEDES website [www.cedes.com](http://www.cedes.com).