

PC-BX05 People Counter Installation Guide & User's Manual

GETTING STARTED: PLEASE READ THIS MANUAL CAREFULLY BEFORE INSTALLATION

When installed as explained below, the photoelectric sensor emits an invisible beam of light that travels across a maximum distance of 5 meters (~16ft) between sensor and the reflector. When a person crosses this beam a digital signal is sent to the counter incrementing its display by +1. This unit counts up regardless of the direction of traffic (entering or exiting). Removal of power to the display does not reset the counter. It will maintain its count until the reset button on the display is depressed. This system operates with a safe low voltage 12V DC supply (included).

Components:

- Counter Display
- Retroreflective Photoelectric Sensor With 10ft Cable (W25xH65xL75mm)
- MS-4 Round Reflector (80mm diameter)
- 12V DC Power Supply With 10ft Cable

Optional Components:

- Count Recorder
- Chime
- Magnetic Reset



INSTALLATION

By following the simple guidelines below your people counter will be operating within a few minutes.

1. Adding Cable Length *(Skip this step if you plan on using the standard 10ft cable provided)*

- 1.1. You may use your own cable (according to the specifications listed in figure 2) if you wish to extend the distance from the components (up to 1000ft with shielded cable). To remove the sensor cover, loosen the screw on the sensor housing and pull the cover off exposing the wire terminals. (Refer to Figures 1 and 2)

2. Mounting Components

- 2.1. Sensor: The sensor should be installed securely using the mounting brackets supplied with the sensor at a level that people will break the beam (mounting screws not included). The sensor is most effective when mounted about 3-4ft above the ground (aim at the torso section), or 4-5ft to ignore children in counts. Plan to mount the reflector directly across from the sensor at a distance no greater than 5 meters (16ft), but **DO NOT PERMANENTLY MOUNT THE REFLECTOR UNTIL STEP 4**. Mounting suggestions are located in figure 4. (Refer to Figures 3 and 4)
- 2.2. Display and/or Chime: The display or chime can be set in any convenient indoor location or mounted to a secure surface using the mounting flanges.
- 2.3. Count Recorder: If your system is equip with a PCDL-1000 Count Recorder, it is suggested to mount the Count Recorder using Velcro (soft side applied to Count Recorder) in an area with easy access but is limited to personnel only.

3. Wiring Components

- 3.1. Power Supply/Transformer: Your system comes with a 2-conductor (red/blk) cable with fork connectors on one end. Connect the fork terminals to the white power supply (CHECK POLARITY) (Refer to Figure 2)
- 3.2. Display: Connect the wires from the sensor, power supply, Count Recorder¹ and chime¹ to the back of the display according to the wiring diagram, while adhering to the wiring codes established for your state and locality. Excess wire length can be trimmed. If a Count Recorder is being used please follow the included instructions with the Count Recorder along with the wiring guide in figure 2.

4. Aligning and Mounting Reflector

- 4.1. After the sensor, display and optional components have been mounted and wired, connect the power supply to a 120V AC outlet and take note of the lights on the sensor. Focus your attention on the yellow light.
- 4.2. The sensor and reflector should be aligned so that the yellow light is NOT illuminated when nothing is blocking the path between the sensor and the reflector (the green light may or may not be on). If the yellow light is illuminated, adjustments to the alignment of the reflector need to be made until the yellow light remains off with nothing blocking the beam. Further adjustments to the sensor alignment can be accomplished by loosening the screws on the sensor bracket in order to point the sensor up or down or side to side.
- 4.3. Once aligned properly the yellow light will NOT be illuminated. When the beam is broken, the yellow light will illuminate and the count will be incremented by +1. Make sure to secure the reflector and sensor in order to maintain alignment.
- 4.4. The photoelectric sensor includes adjustments for both sensitivity and signal-delay² located under the sensor cover. These settings are factory set and should not require adjustment. If adjustment becomes necessary due to unforeseen conditions, the time delay or sensitivity can be increased or decreased by rotating the appropriate adjustment using the small blue screwdriver provided. Turning clockwise will increase and counterclockwise will decrease. Increasing the time delay is generally used to count groups of people as one count.

5. Your Counting System Is Ready For Operation

- 5.1. Resetting the Display: Pressing the black button to the right of the display will reset the counter back to zero. If system is equipped with magnetic reset, apply supplied magnet to the area labeled reset³. ¹Optional component, ²Not available on all systems, ³Location may vary

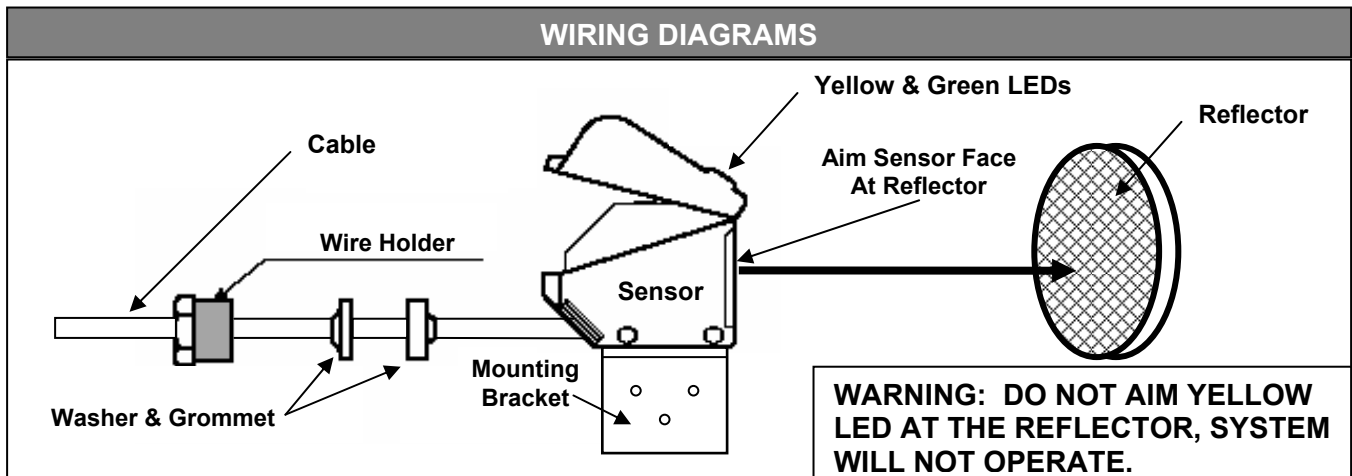


Figure 1

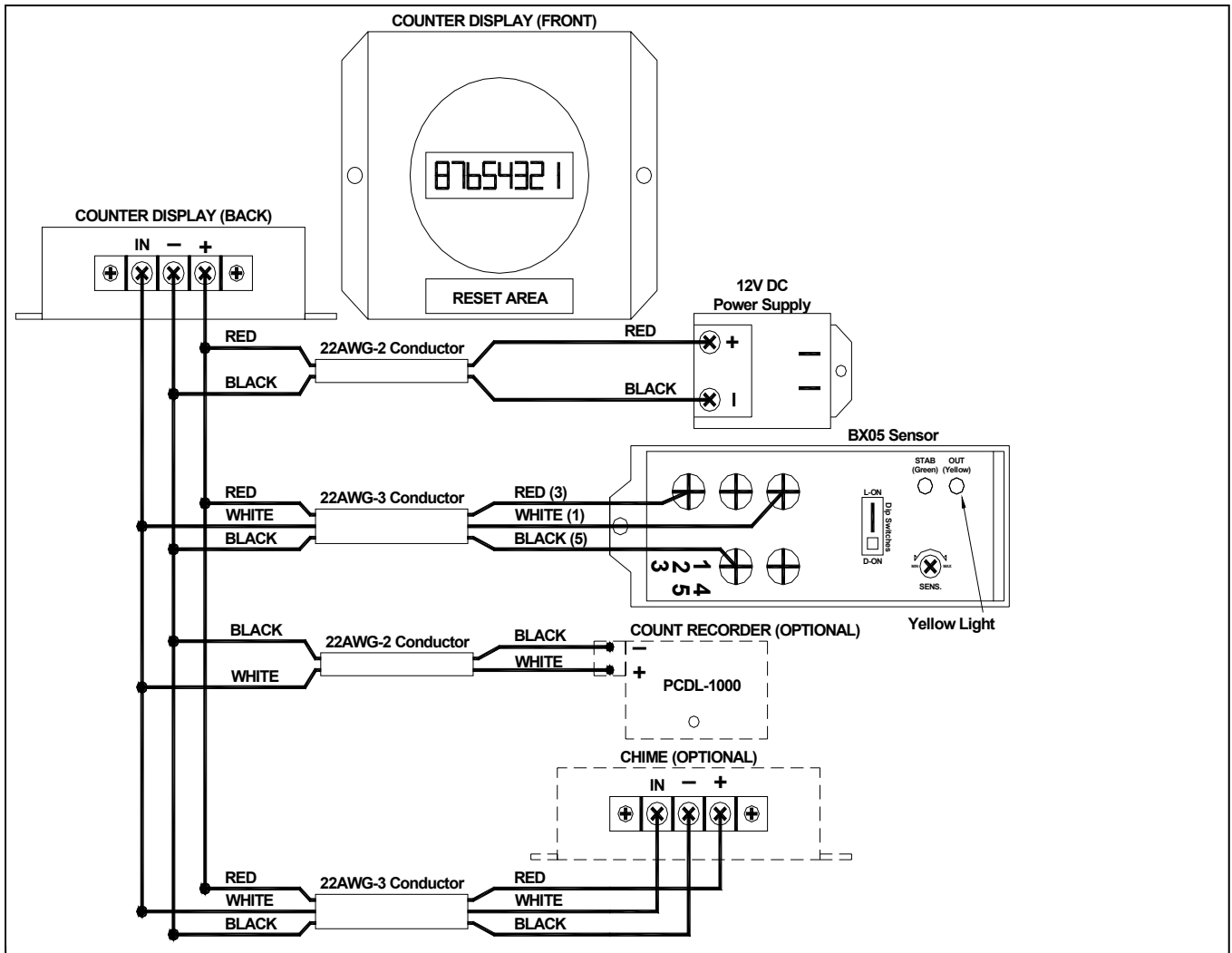


Figure 2

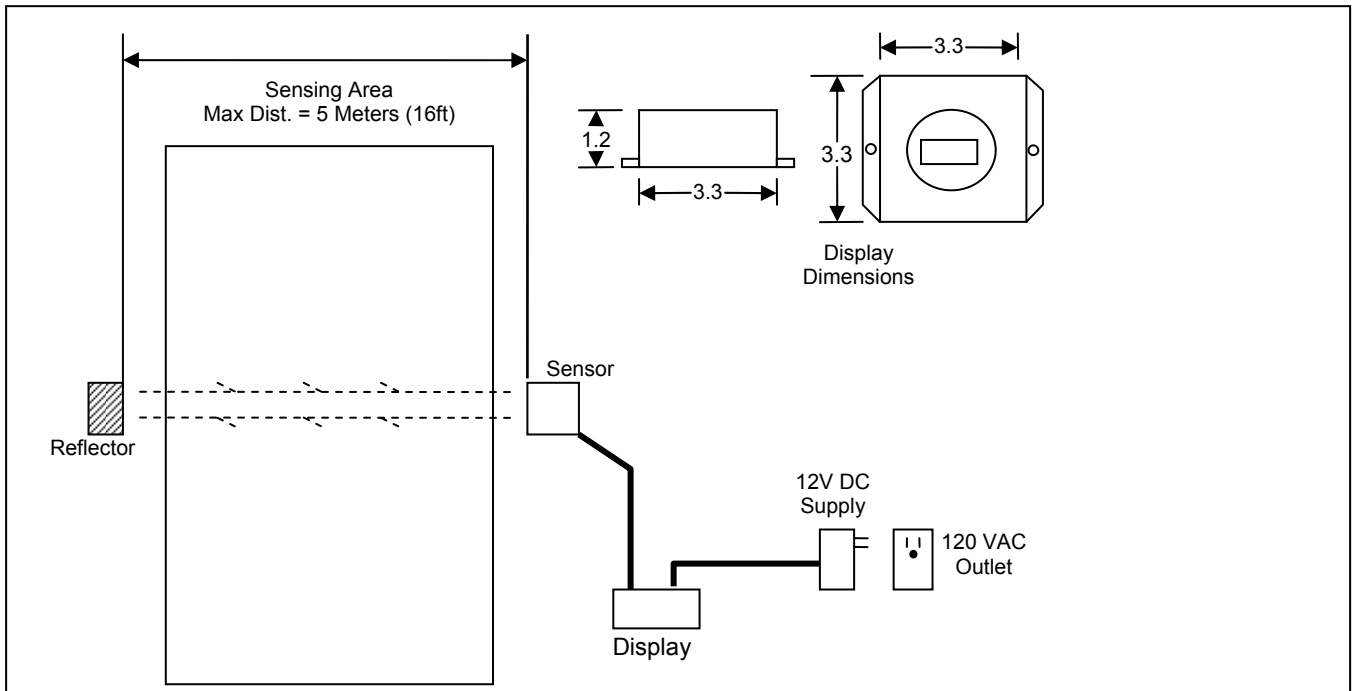


Figure 3

SENSOR / REFLECTOR MOUNTING & ALIGNMENT

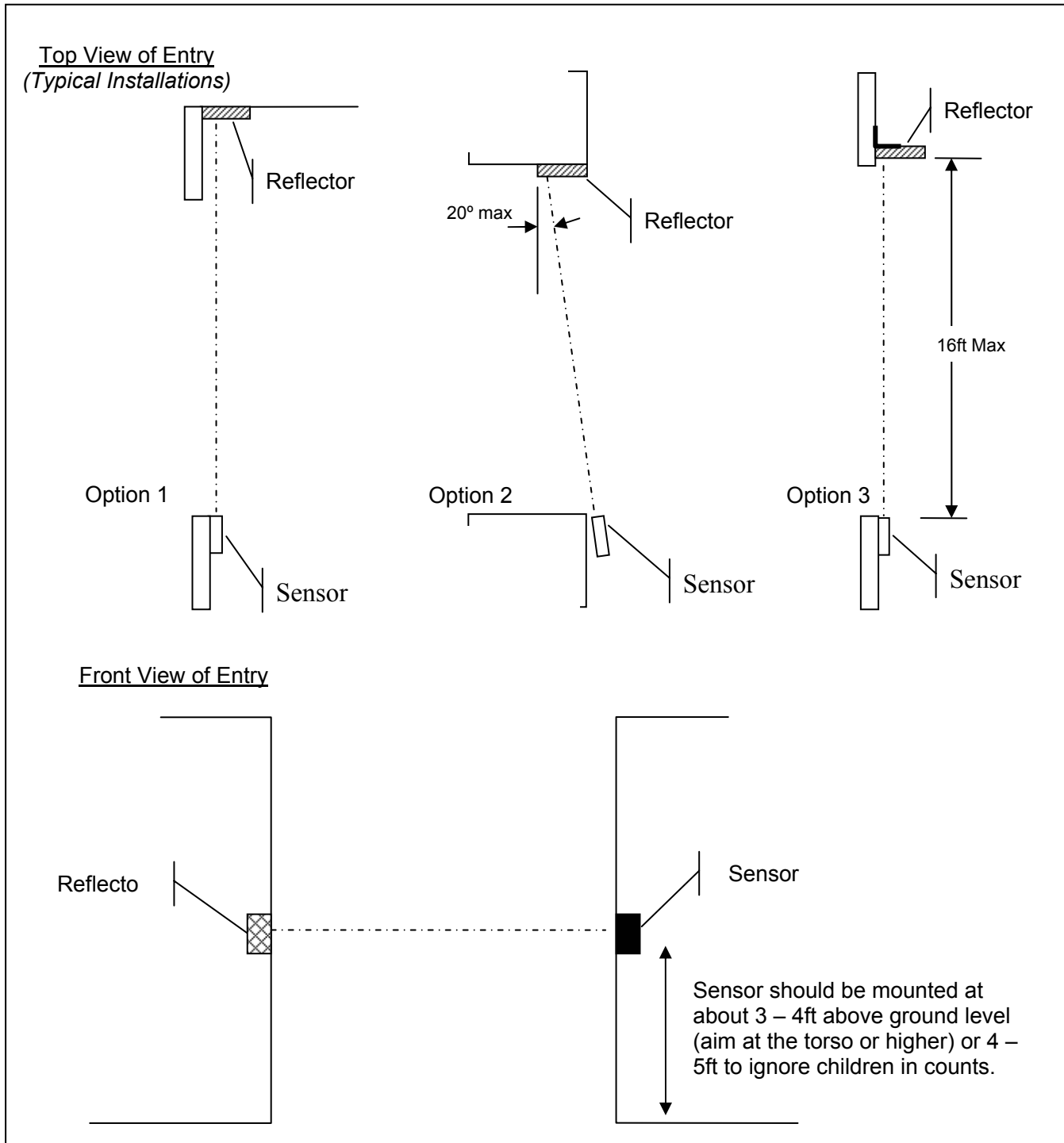


Figure 4