

## People Counter with Data Recorder

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### PC-RBX05



#### **Description:**

When installed as explained below, the photoelectric sensor and the reflector generate an invisible beam of light that travels across a maximum distance of 5 meters (~16ft) between sensor and reflector. When a person crosses the beam a digital signal is sent to the count recorder which increments by +1. This unit counts up regardless of the direction of traffic (entering or exiting). This system operates with a safe low voltage 12V DC supply (included).

#### **Components:**

- ? Retroreflective Photoelectric Sensor With 10ft Cable (W25xH65xL75mm)
- ? Reflector (40.5x60.5mm).
- ? 12V DC Power Supply With 10ft Cable
- ? Count Recorder
- ? Chime (*optional*)

#### **Maintenance:**

Occasionally it may be necessary to wipe the lens of the reflector and sensor clean from debris and dust. Use a soft cotton cloth with a mild detergent.

#### **Support:**

For technical assistance please call 330.792.7089

#### **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.*

Refer to Figure 1 and 2

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). Sensor cover can be removed by loosening the screw on the sensor housing and pulling the top off. If removed, replace the sensor cover and screw it back into place.

#### **2. Mounting Components**

Refer to Figure 3

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.



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Plan to mount the reflector directly across from the sensor at a distance no greater than 5 meters (16ft). **DO NOT MOUNT THE REFLECTOR UNTIL STEP 4.** Make sure nothing is in the path of the sensor and where the reflector will be mounted. Mounting suggestions are located in figure 3.

The count recorder can be mounted or set in any convenient indoor location. Place near the sensor for autonomous operation or near your computer for a permanent PC connection. For more system layout suggestions refer to the count recorder manual.

### 3. Wiring Components

Refer to Figure 2

Connect the wires from the sensor, power supply, count recorder, and chime (*optional*) to the terminal strip according to the wiring diagram, while adhering to the wiring codes established for your state and locality. Excess wire length can be trimmed. Please follow the included instructions with the count recorder along with the wiring guide in figure 2.

### 4. Aligning and Mounting Reflector

After the sensor and count recorder are 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.

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 reflector (the green light may or may not be on). If the yellow light is illuminated, adjustments to the alignment 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.

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.

**NOTE:** The photoelectric sensor includes adjustments for both sensitivity and signal delay 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 will reduce false signals but slow the operation of the sensor.

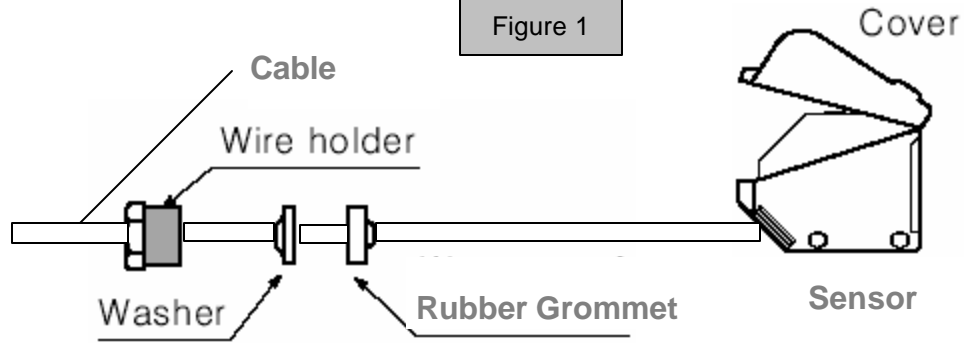
### 5. Your counting system is ready for operation

**NOTE:** Please refer to the Count Recorder manual for further information.

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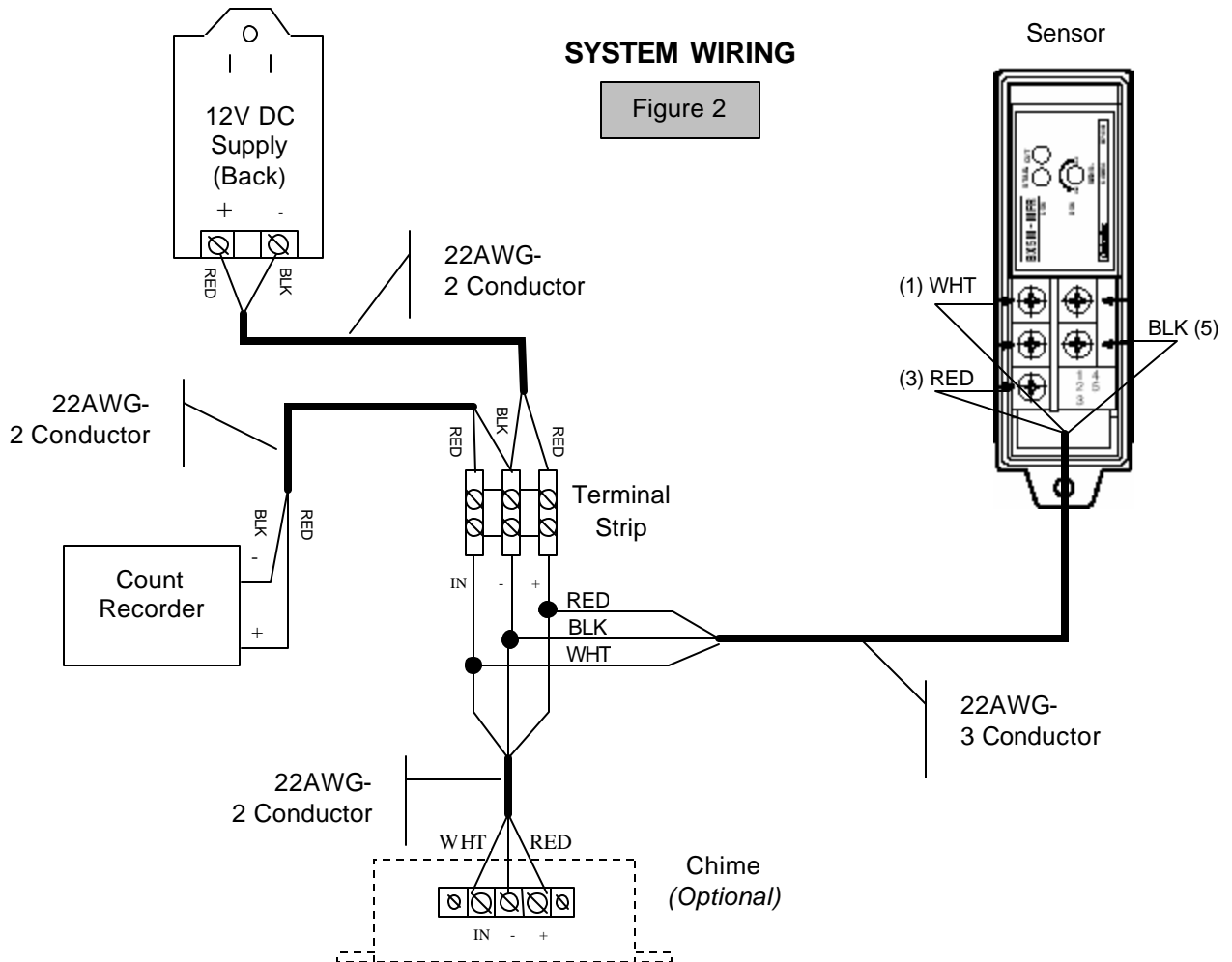
### CABLE INSTALLATION

Figure 1



### SYSTEM WIRING

Figure 2

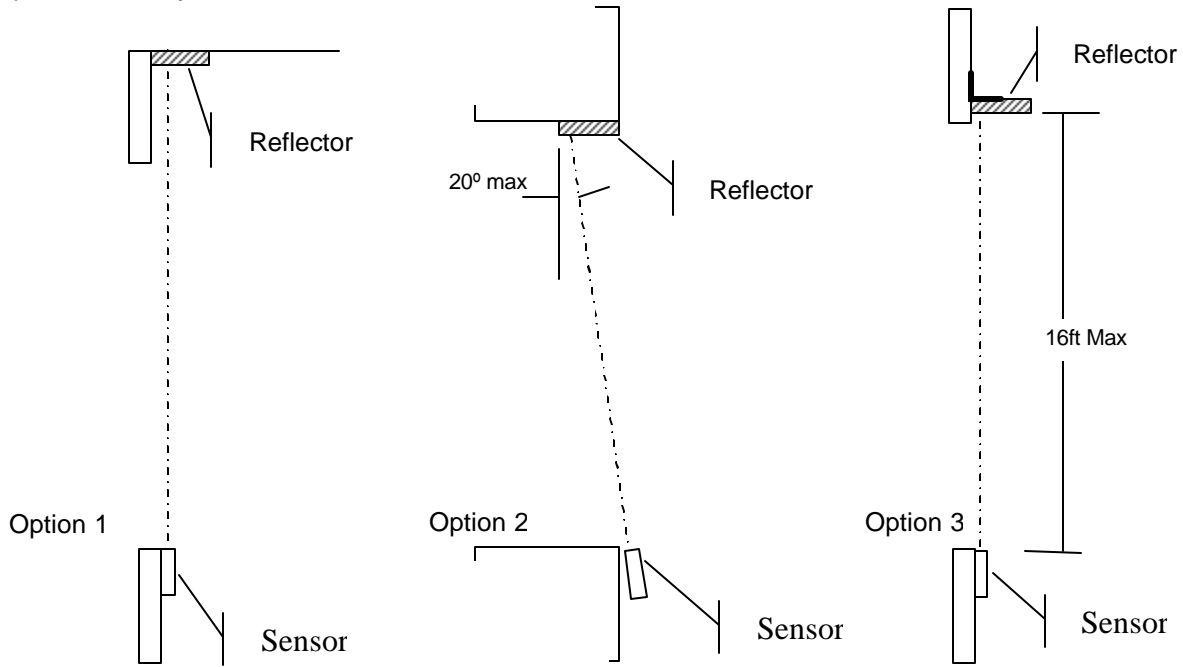


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### SENSOR/REFLECTOR MOUNTING & ALIGNMENT (Typical Installations)

Figure 3

Top View of Entry



Front View of Entry

