

## PCW-SBX03 - Installation Guide

### Directional Counter

AC powered dual IR sensors for directional counting with integrated LCD counter and optional 900Mhz RF transmitter.

#### Main Features

- Dual Beam IR Operation for directional counts
- Front or side firing IR beam(s)
- Unique serial number embedded in radio data packets
- IR Sensors have 10 ft sensing range
- Integrated 2-line LCD display
- Integrated mounting flange
- 120 VAC wall transformer (9V DC) included
- 900 MHz optional radio transmitter with unique ID
- Optional Gimbal Bracket Mount for optimum sensor alignment
- Small 3.3" X 3.3" X 1.25" ABS enclosure



#### Description:

The PCW Directional Sensor with Counter provides a local display of the beam interruption counts. By using dual IR beams, the Directional Counter can determine and display the counts for both directions of travel as shown below. The 900 MHz radio facilitates easy installation and enables communication to a SenSource Count Server (PCW-CSRX-) or Sensor Server (PCW-SSRX-). The Sensor/Counter can be reset to zero with a magnet.

#### Technical Features:

PARAMETER	MIN	TYP	MAX	UNITS
IR range	-	-	10	Feet
Supply Voltage	-	9	-	Volts
Supply Current	70	-	200	mA
Radio range (optional 418 MHz transmitter)	-	600	-	Feet
Radio range 900 MHz transmitter	-	1500	-	Feet
Enclosure 3.3"X3.3"X1.25" ABS Plastic	-	-	-	-

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### Installation

- 1.) Choose an area to mount the counter and reflector so that the face of the counter (the side with the LED indicators) is pointing directly at the face of the reflector and separated by a distance no greater than 10ft. The mounting surface should be sturdy in order to prevent misalignment by bumping into the counter or reflector. The counter/reflector should not be mounted in an area where an entry or exit door may interrupt the beam. The reflector is not required to be perpendicular with the sensor face but it should not be offset by an angle greater than about 15°.
- 2.) Connect the power supply to a 110V AC outlet and check alignment of the transmitter and reflector by observing the LED indicator on the counter. Each time the invisible IR beams are broken the LED will flash for a brief moment and the counter display will increment as shown below. If the LED operates as specified then alignment is accomplished and your installation is complete.
- 3.) If the sensor does not operate as specified then further alignment may be necessary. If you have the optional gimbal mount for the counter you may need to adjust the counter so that the photoelectric beams are directed at the reflector. If you do not have the gimbal mount you may also align the counter by inserting shims below the counter in the appropriate area. Once aligned your counter is ready for operation.
- 4.) You can reset the display if necessary by placing the magnetic reset tool on the top surface to the right side of the display area on the counter as shown below for about 5 seconds. Resetting the display will also transmit a signal to a Count Server or Sensor Server in order that it may recognize the counter and begin monitoring it. (If using a wireless server, refer to its manual for more information).

