

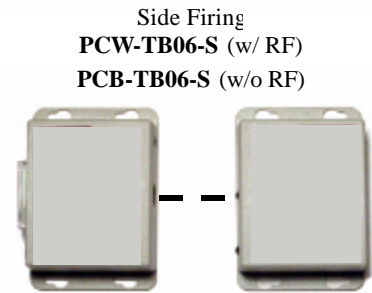
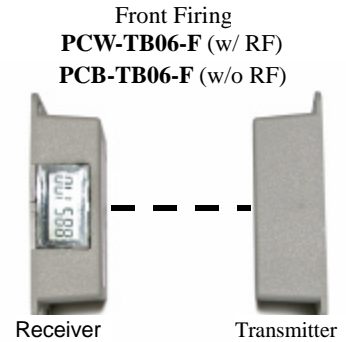
PCW-TB06 - Installation Guide

Non-Directional Counter

Battery operated IR transmitter & receiver with integrated counter and optional RF transmitter

Features

- Battery operated for a truly wireless installation
- Radio interface operates with all SenSource PCW Receivers
- Unique serial number embedded in radio data packets
- Integrated 6-digit LCD beam interrupt counter
- Integrated mounting flange
- Optional flush-mount wall box kit
- Up to 20 Ft. IR transmission range
- Up to 600 Ft. radio range
- Counts beam interruptions and total beam interrupt duration
- 2.0" X 2.5" X 1.0" ABS enclosures
- Energy managed low power modes for long battery life
- User replaceable batteries



Description:

The SenSource PCW-TB30 IR Sensor/Counter is a battery operated infrared beam interruption sensor with an Optional 418 MHz radio transmitter. The sensor consists of two parts; the IR transmitter and the IR receiver. The IR receiver has an integrated 6-digit LCD counter and a radio transmitter for truly wireless installation and operation. The IR transmitter and receiver operate across a distance of up to 20 feet. The IR transmitter flashes 16 pulses of high intensity IR each second, enabling the receiver to distinguish these pulses from any other source of IR light. This characteristic allows the IR sensor to operate in almost any environment without interference from ambient lighting.

PARAMETER	MIN	TYP	MAX	UNITS
Battery life IR receiver	1	3	6.5	Years
Battery life IR transmitter		1		Years
Battery type; Tadiran TL-2100	-	-	-	-
IR range (sensing Distance)	.5		20	feet
Radio range		600		feet
IR receiver pushbutton down to reset time	4		8	seconds
IR receiver pushbutton down to Standby Mode	8		-	seconds
IR transmitter pushbutton down to wake time	4		8	seconds
IR transmitter pushbutton down to Standby Mode	8		-	seconds
Enclosure 2.0"X2.5"X1.0" ABS Plastic	-	-	-	-

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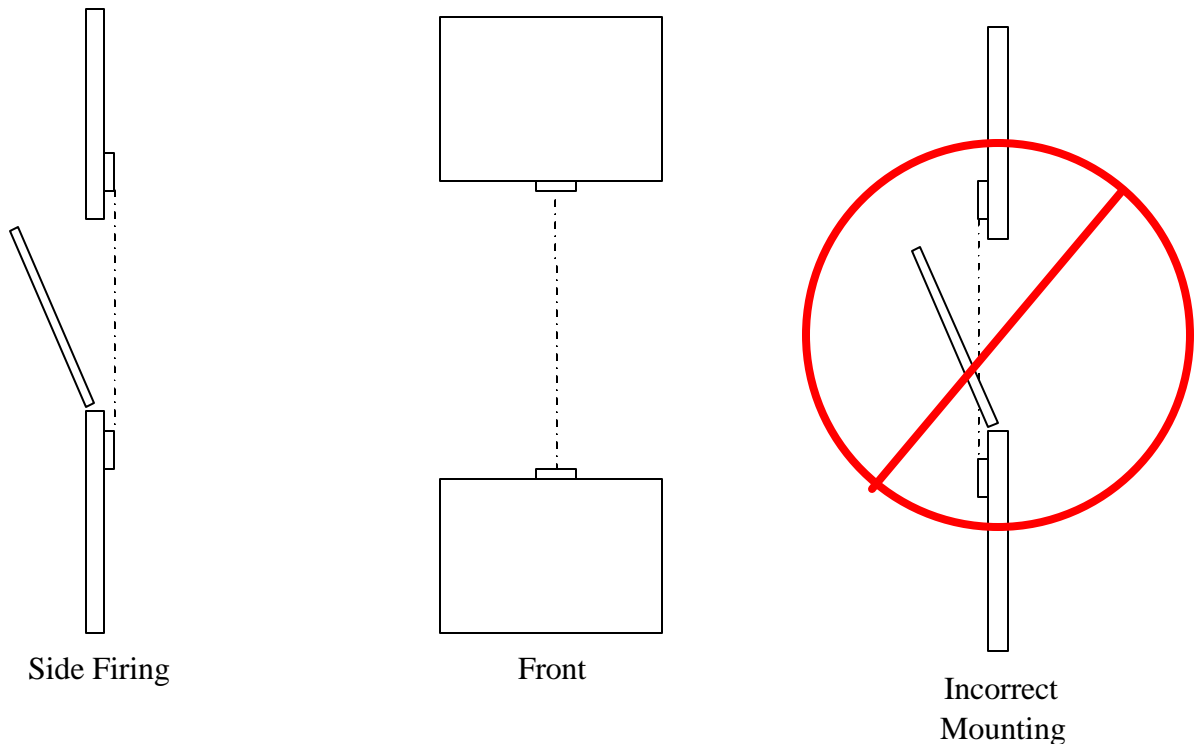
Installation:

- 1.) Chose an area to mount the transmitter (unit without display) and receiver (unit with display) so that the face (the side with the LED indicators) will be perpendicular (pointing directly at each other) and separated by a distance no greater than 20ft. The sensor should be mounted at about 3 – 4ft to count all traffic and at about 4 – 5ft to count only adult traffic. The surface should be sturdy in order to prevent misalignment by bumping into the sensor or mounting surface.

Note: The transmitter/receiver should not be mounted such that a door opening or closing will interrupt the IR beam. If mounted in this way the receiver will count door openings/closings and may or may not count people.

- 2.) Place the transmitter and receiver in On-Line Mode (see programming section below) and select the power level depending on the distance between the sensors as determined in step 1
- 3.) Check alignment of the transmitter and receiver by observing the LED indicator on the receiver. Each time the invisible IR beam is broken the LED will flash for a brief moment. If the LED operates as specified then alignment is complete and your installation is complete.
- 4.) If the transmitter and receiver need further alignment you can place the receiver in Setup Mode (see programming section below) in order to aid in the alignment. Once properly aligned secure the transmitter and receiver and your hardware installation is complete.
- 5.) If integrating with a Count Server or Sensor Server please reference the readme.txt file and manual provided on the software CD for the server.

Top View of Entry/Exit



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Programming:

Standby Mode: The IR receiver and IR transmitter can be placed in a Standby Mode (factory default setting) to lower energy usage and to prevent radio transmissions during shipping. Holding the pushbutton down for a period of time greater than 8 seconds and then releasing will enter Standby Mode. IR receiver Standby Mode is indicated by the LCD display counting automatically 1 count each second. When shipped from the manufacturer the IR counter will always be in Standby Mode. A rapid flashing of the LED indicates IR transmitter Standby Mode when the pushbutton is pressed for less than 4 seconds.

Online Mode: Both the receiver and the transmitter are shipped in Standby Mode and must be placed in Online Mode for normal operation. Online mode activates the transmitter and receiver and is entered from Standby Mode by pushing and holding the pushbutton for greater than 4 seconds and less than 8 seconds or for the IR receiver until the LCD display clears to zero. The IR transmitter indicates Standby Mode by a rapid flashing of the LED whenever the pushbutton is pressed for periods of less than 4 seconds. In Online Mode the LED on the front of the receiver will flash briefly each time the IR beam is interrupted. The LCD counter will count each beam interruption and the internal 24-bit counters will count the beam-interruption and the beam-interruption-time.

Setup Mode: While in Online Mode the user can place the receiver in Setup Mode by pushing the pushbutton for a short time of about 1-2 seconds. The receiver will be placed in Setup Mode to aid in alignment of the transmitter and receiver. For a period of 2 minutes the LED on the receiver will glow to indicate the reception of the IR beam from the transmitter. After two minutes or 8-seconds of uninterrupted beam the receiver will exit Setup Mode and return to Online Mode. Setup Mode is also used to send an RF signal to PCW Count Servers or Sensor Servers in order to enable sensors to be monitored by the server (If using a server, refer to its manual for more information).

Reset: The LCD counter and the internal 24-bit counters will be a reset each time the push button on the IR receiver is pushed and held for more than 4 seconds. Counter reset is best performed after the receiver and transmitter have been setup for Online Mode operation using Setup Mode.

