



# Display People Counter

## User Guide

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## Product Overview

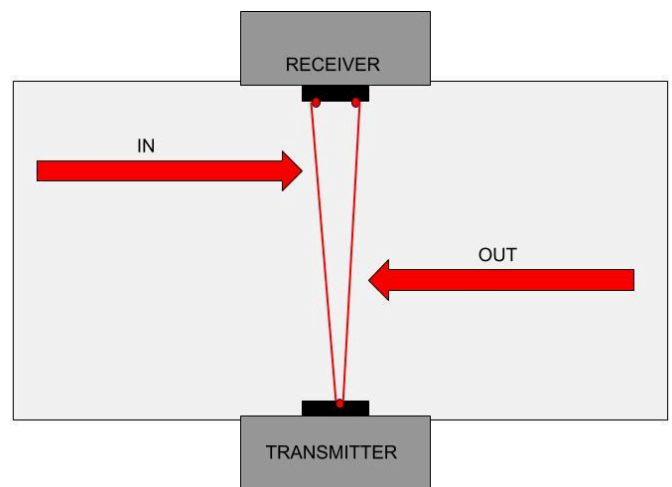
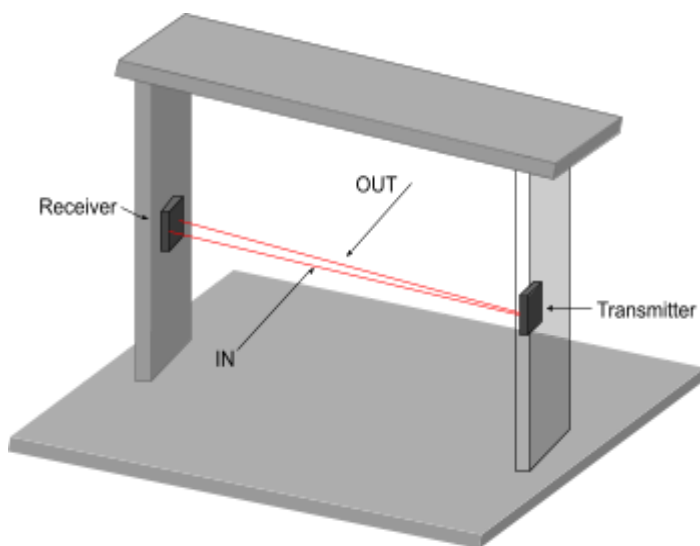
The Receiver PRx20D1 - Transmitter PTx20-1 is a bi-directional people counter. The principle is based on the interruption of a horizontal infrared beam from the Transmitter PTx20-1 causing the Receiver PRx20D1 to display incremental counts .

When the outer edge of the wide horizontal infrared beam is interrupted in either direction, e.g. by a person, car, bike, pram etc. the Receiver PRx20D1 detects this disruption and will increase the internal display counter.

The Receiver PRx20D1 is direction sensitive, which means counts in both directions are captured and displayed separately on the screen.

Features include a 6-digit LCD display, integrated brackets for easy yet sturdy mounting, long battery life and reads through glass. The counters can be fitted on Anti-Shoplifting Gates without causing any interference or standard entrances up to 8 metres wide. The counters have protection against other electrical transmission noise and do not respond to rapid hand waves or short-term beam breaks.

At the end of the day, the person responsible can visually record the total footfall numbers for the day from the LCD display and manually add them to a notebook or Excel Spreadsheet for detailed analysis before resetting the count display back to zero. Resetting the display counts back to zero is simply achieved with the use of a keychain magnet.



Both the Receiver PRx20D1 - Transmitter PTx20-1 sensors can run for approximately up to 1 year on a set of AA batteries.

## Features

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>★ Easy installation</li> <li>★ Long battery life (AA Batteries)</li> <li>★ Distortion indication</li> <li>★ Easy to read count value</li> </ul> | <ul style="list-style-type: none"> <li>★ Separate bidirectional counting</li> <li>★ European designed and built</li> <li>★ 1 Year warranty</li> <li>★ No ongoing management cost</li> </ul> |
|--|---|

## Specifications

<b>Dimensions</b>	116.4 x 68.6 x 22.3 mm
<b>Material</b>	ABS black
<b>Battery Life</b>	Approx 12 months
<b>Power Supply</b>	2 x 1.5V AA
<b>Max recording width</b>	6 Metres (8 Metres with extra power transmitter)
<b>Maximum count value</b>	999999 both ways

## Delivered Contents

- Receiver (PRx20D1)
- Transmitter (PTx20-1)
- Magnet key hanger
- Screwdriver
- 2 x Screw to lock covers
- 4 x AA Alkaline batteries
- Installation guide

## Installing People Counters

When mounting the People Counters take care of the following:

- The maximum distance between the Transmitter PTx20-1 and Receiver PRx20D1 is 6 metres\*.
- Use a wall or other steady object to mount Transmitter PTx20-1 and Receiver PRx20D1\*\*.
- Avoid positioning the sensors in direct sunlight for an extended length of time.
- Avoid the possibility of obstacles blocking or part blocking the infrared beam line of sight between the Transmitter PTx20-1 and Receiver PRx20D1.

### **Accuracy of the People Counter**

*The accuracy of the counter will be higher when the distance between the Transmitter and the Receiver gets shorter. When one or more persons pass the infrared beam very close together at once, the People Counter will increase the count value by only one.*

\* 8 metres is possible with an extra power Transmitter PTx20-1 LP - contact EvolvePlus for more information.

\*\* Metal rotational and/or right angled brackets and are available for purchase if required - contact EvolvePlus for more information.

## Checking Alignment of People Counter Sensors

Once the batteries have been fitted, we recommend test aligning the counters before permanent wall fixing.

In order to achieve accurate counting, the Receiver PRx20D1 needs to 'see' the infrared beam from Transmitter PTx20-1.

The Receiver PRx20D1 contains an alignment feature which helps you to pair the Transmitter PTx20-1 to the Receiver PRx20D1.

### Positioning and Alignment Steps

#### **Step 1**

Position the Receiver PRx20D1 and Transmitter PTx20-1 opposite each other at the same height. (The optimum mounting height is between 1000mm to 1400 mm)

#### **Step 2**

To enable the alignment mode, slide the magnet on the top of the Receiver PRx20D1 in any direction.



#### **Step 3**

The LED will start blinking **RED** looking for the Transmitter PTx20-1. If the Transmitter is correctly positioned the LED will switch to a continuous solid **GREEN**. If the LED remains **RED** or occasionally flickers **RED**, move the Transmitter PTx20-1 until Receiver PRx20D1 LED lights up **GREEN** continuously.



### Step 4

When the **GREEN** LED is solid, slide the magnet back in the opposite direction along the top of Receiver PRx20D1. Alternately, the alignment mode automatically stops after 1 minute.



### Step 5

Mark the position of Receiver PRx20D1 and Transmitter PTx20-1 in preparation for permanent installation.

## Installing People Counter Sensors

*Note: The batteries have already been inserted in the People Counter Sensors for your organisation*

### Installing Mounting Plate

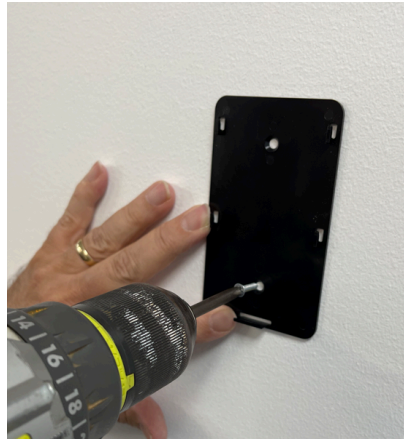
1. The Receiver and Transmitter Sensor Unit is supplied with a plastic Mounting Plate to use for securing on a wall, pole, fence, etc. The mounting plate slides down off the back to reveal 2 x screw mounting holes.



2. There are two possible methods of attaching the mounting plate to your preferred area.

OPTION 1

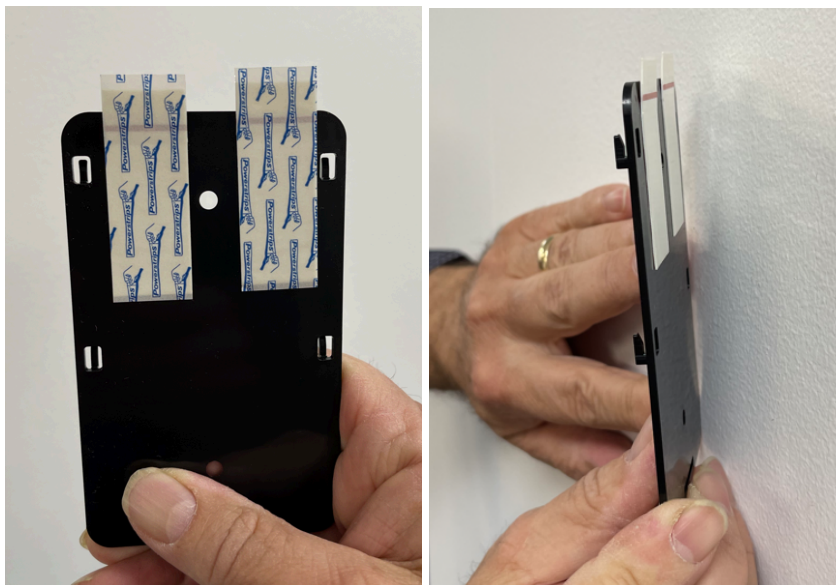
The first method involves installing the mounting bracket onto the surface using 2 x screws. The optimum mounting height is between 800mm to 1400 mm.



*Note: in some cases, organizations have used double-sided Velcro tape to temporarily affix units to the fixed objects, which allows them to test the counting distance before attaching the units to the walls with screws.*

OPTION 2

The second method is to use 2 x double-sided strips for each mounting plate. If using removable Command strips, ensure to have the pull tab **VISIBLE** at the top (or bottom), this will ensure the easy removal of the mounting plate.





### Receiver PRx20W1 Sensor Installation

3. Once the mounting plate has been installed, slide the People Counter Sensor onto the plate. Ensure the People Counter Sensor is the right way up (Battery Compartment at bottom). Once the People Counter Sensor is placed on the mounting plate, install the batteries into their correct polarity positions.



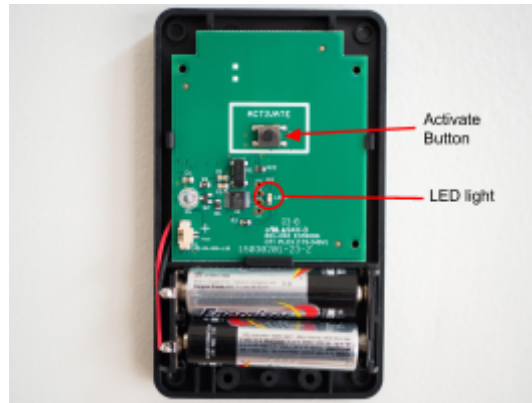
4. Now place the front cover back on. Ensure the front cover is positioned correctly by starting at the top of the sensor case. There are two lugs on the top of the counter which clip into the cover to lock a secure fit. Then push the bottom part of the cover until it fits into place. With the mini screws provided, secure the cover to the base as shown in the photo below.





## Transmitter PTx20-1 Sensor Installation

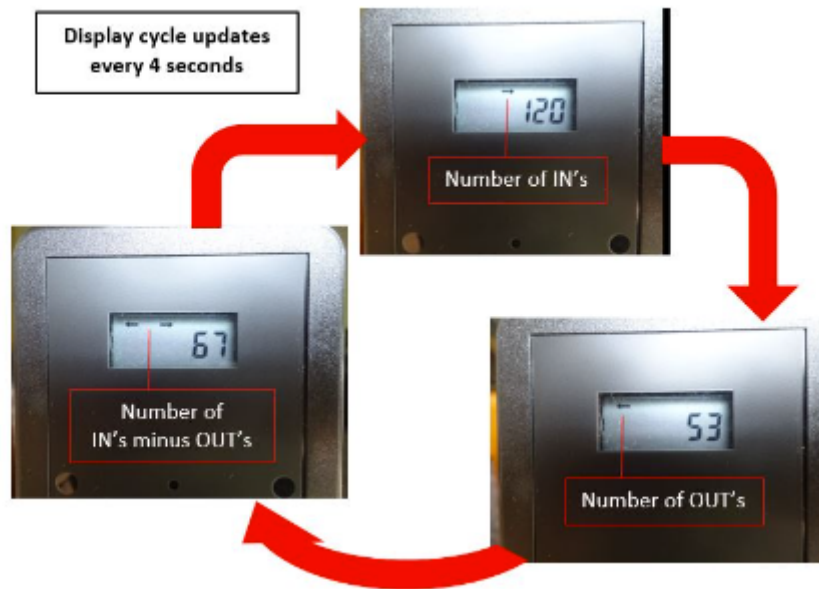
- When the Transmitter (PTx20-1) is powered correctly the red LED in the circuit board will flash.  
Alternately, to activate the Transmitter (PTx20-1), press and release the small ACTIVATE Button. The Status LED will blink twice during activation.



- Front Cover Fitting: Ensure the front cover is positioned correctly (as per step 4) by starting at the top of the sensor case. There are two lugs on the top of the counter which clip into the cover to lock a secure fit. Then push the bottom part of the cover until it fits into place. With the mini screws provided, secure the cover to the base.

## Start Counting

The count value on the display will count from 0 to 999999 for one or both directions separately depending on the type of counter. The green status LED on the receiver will blink once each time a count is created in either direction.



## Resetting the Count Value

To reset the value on the display to '0', slide the magnet in one direction over the top side of the Receiver PRx20D1 (Sensor with the screen display).

*Note: The alignment mode in the Receiver PRx20D1 will also be activated when resetting the display back to '0'. Slide the magnet back across the top in the opposite direction to disable the alignment mode. Alternately, the alignment mode automatically stops after 1 minute.*

## ENI (Enhanced Noise Immunity)

The Receiver PRx20D1 is equipped with ENI technology which enables it to work in environments where transmission noise exists. Based on DSP Technology, the sensors are able to filter out infrared and electrical disturbances like AM Anti-Shoplifting Gates, IR Auto Doors etc.

If there is too much transmission noise, the LED will light up **RED** on the Receiver PRx20D1. In this case, find the source of the disturbance and remove it.

## Battery Life

Both the Receiver PRx20D1 - Transmitter PTx20-1 sensors can run for approximately up to 1 year on a set of good quality Alkaline AA batteries (e.g. Energizer Max).

When the batteries are starting to run low - the LED will flash **RED** every couple of seconds. Replace the AA batteries as soon as possible.

## Additional Information

*The measurement width of 6 metres will decrease when the infrared signal goes through glass. An extra power Transmitter PTx20-1 XLP is available - contact EvolvePlus for more information.*

*Be aware of infrared light from other sources like bright lights and infrared devices. When the PRx20D1 receives infrared from other sources, instead of the PTx20-1 Transmitter, unexpected behavior could be the result.*

*Due to the strong field of AM anti-shoplifting systems, it is recommended to place the People Counter at least 1 metre away from an AM system.*

*When there is no activity and no counts are made, the LCD screen will automatically switch between the totals of both directions.*

## Optional Accessories For Purchase

### Metal Rotational Bracket

The versatility of the pivoting door sensor holder makes fitting simple at entrances where the mounting location may not be at right angles.

Available only in a black finish and supplied as a set of two.



### Polycarbonate Right Angled Bracket

This sleek-looking bracket is suitable for door/frame mounting for use when fixing the people counters flush against a wall is not possible. The bracket is also available in an extended length to clear interference from power sliding doors.

Available only in a clear finish and supplied as a set of two.



### Protective Bracket

Consisting of a rear/side mounting bracket with a clear plastic cover, these brackets provide robust housing for people counters that require additional protection when mounted in tougher indoor conditions like washroom entrances.

Available only in a black finish with a clear Perspex front case and supplied as a set of two.

