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EvolvePlus Pty Ltd

LCD Screen People Counter

Installation Guide & Operating Instructions

Models: PRx20D1 - PTx20-1
PRx10D1 - PTx10-1

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Overview – PRx20D1 – PTx20-1(Bi-directional)

The PRx20D1 - PTx20-1 (LCD screen display model) is a bi-directional people counter. The principle is based on the interruption of a horizontal infrared beam.

The transmitter PTx20-1 transmits the infrared beam to the receiver "PRx20D1". When this infrared beam is interrupted, e.g. by a person, the receiver detects this and will increase the internal counter.

The PRx20D2 is direction sensitive, which means that counts in both directions are captured and stored separately.

The counter can run for approximately up to 1 year on a set of batteries, without compromising the counting distance.

Overview – PRx10D1 – PTx10-1(Uni-directional)

The PRx10D1 – PTx10-1 (LCD screen display model) is a uni-directional people counter. The principle is based on the interruption of a horizontal infrared beam.

The transmitter PTx10-1 transmits the infrared beam to the receiver "PRx10D1". When this infrared beam is interrupted, e.g. by a person, the receiver detects this and will increase the internal counter.

The PRx10D1 is <u>not</u> direction sensitive, which means that counts from both directions are captured and stored together.

The counter can run for approximately up to 3 years on a set of batteries, without compromising the counting distance.

Specifications

<u>Mechanical</u>
Dimensions   116.4 x 68.6 x 22.3 mm
Material   ABS black

<u>Electrical</u>
Power supply   2 x 1.5V AA
Battery life
- PRx20D1 & PTx20-1   : approx. 1 year
- PRx10D1 & PTx10-1   : up to 3 years

<u>Operational</u>
Measurement width
- PRx20D1 & PTx20-1   : 6 metres
- PRx10D1 & PTx10-1   : 8 metres
Maximum count value
- PRx20D1 & PTx20-1   : 999999 in both directions
- PRx10D1 & PTx10-1   : 999999

<u>Delivered content</u>
- Receiver (PRx20D1 or PRx10D1)
- Transmitter (PTx20-1 or PTx10-1)
- Magnet key hanger
- Screwdriver
- 2x Screw to lock covers
- 4x AA Alkaline Batteries
- Installation Guide

<u>Additional content</u>
- Right angled metal mounting brackets

Battery Installation

The people counters are delivered closed and not secured with screws. Open the covers and place batteries into battery compartment carefully taking note of the correct polarity.

When the transmitter counter (PTx20-1 or PTx10-1) is powered correctly the red LED in the circuit board will flash.

When the receiver counter (PRx20D1 or PRx10D1) is powered correctly the LCD display screen will show '0'.
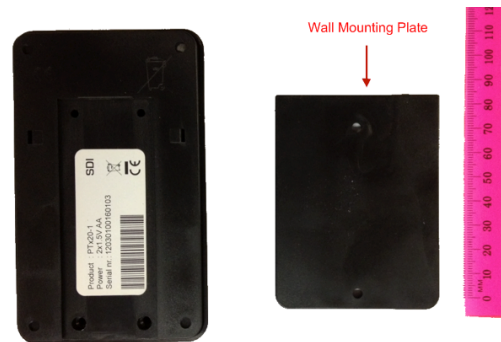
Install People Counters

When mounting the People Counters take care of the following:

- The maximum distance between the transmitter PTx20-1 and receiver PRx20D1 is 8 metres.
- The maximum distance between the transmitter PTx10-1 and receiver PRx10D1 is 10 metres.
- Use a wall or another steady object to mount People Counters (Metal brackets are available for purchase if required).

The units are supplied with a Mounting Plate.

Wall Mounting Plate

Detach the mounting plate from the rear of the units by sliding the plate up.

The mounting plate can be attached to the fixed object using the supplied screws.

The units are then attached to the mount plates by sliding back of the units over the mount plates.
Note: in some cases organisations have used double sided Velcro tape to affix units to the fixed objects, which allows them to test the counting distance before attaching the units to the walls with screws.

An optional right metal bracket is available to suit the RF, USB and Display Only People Counters:

ENI (Enhanced Noise Immunity)

The PRx20D1 and PRx10D1 are equipped with ENI technology which enables them to work in environments where transmission noise exists. If there is too much transmission noise the red LED on the receiver will light up. In this case, find the source of the disturbance and remove it.

Additional information

The measurement width of 8 and 10 metres will decrease when the infrared signal goes through glass.

Be aware of infrared light from other sources like bright lights and infrared devices. When the PRx20D1 or PRx10D1 receives infrared from other sources, instead of the PTx10-1, unexpected behaviour 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.

Check Alignment

To have accurate counting the receiver (PRx20D1 or PRx10D1) needs to 'see' the transmitter (PTx20-1 or PTx10-1).

The receiver contains an alignment feature which helps you to point the transmitter to the receiver.

To enable the alignment mode slide the magnet on the top of the receiver (PRx20D2 or PRx10D2).

When the LED is blinking red you need to point the transmitter to the receiver until the LED lights up green continuously.

Accuracy of the People Counter
The accuracy of the counter will be higher when the distance between the transmitter and receiver gets smaller. When one or more persons pass the infrared beam at once, the People Counter will increase the count value by one.

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.
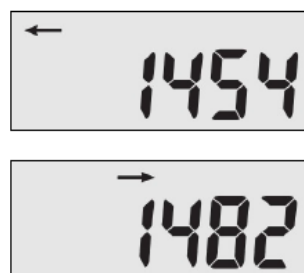
Resetting the count value

To reset the value on the display to 0, slide the magnet over the top side of the receiver (PRx20D1 or PRx10D1).

Note: The alignment mode in the receiver will also be activated when resetting the display.
Slide again with the magnet over the top side to disable the alignment mode.

Determine the direction of the count value (PRx20D1 & PTx20-1)

When a count is made the display will immediately show the new count value of that direction.
The arrow above the count value shows the direction of that value.

When there is no activity and no counts are made, the LCD display will automatically switch between both directions.

IP54 Rated Outdoor Casing

The LED Screen Display People Counters models are available with an optional Outdoor Casing which provides protection and durability for prolonged outdoor use.

An optional metal bracket can be used to assist with mounting (not included with the standard IP54 Casing)