

## Point Six, Inc.

### Wireless IR Proximity Counter Model IRPROX2

## Installation and Operation Instructions

### Description

The new IRPROX2 people counter has a battery life of >2years. The pushbutton on the sensor has the following functions:

**Power Down:** Press and hold the button for > 8 Seconds.

**Test power state:** Press briefly; LED comes on to indicate power down state.

**Power Up :** Press for >2 seconds and <8 seconds, LED goes out.

**Transmit service packet:** Briefly press while powered up.

**IR Program:** Press and hold the button for >8 seconds while sending IR program parameter commands from IR transmitter attached to the serial port of a PC running Prox-Programmer software. When an IR command is properly received and processed the LED will flash to indicate success.

This model has IR ranges of 6,4,3 and 2 feet, switch selectable.

The IR programmability includes:

In-beam time in ¼ second steps to 255 steps. Default: ¼ second.

Out-of-beam time in ¼ second steps to 255 steps. Default: 1 second.

Blocked beam time in ¼ second steps to 255 steps. Default: 16 seconds.

LED flash enable/disable during count. Default: LED flash.

Packet type enable/disable for automatic inclusion of the switch data in a new device type, type "09" the standard people counter is type "11"

Note: IR programmed parameters are stored in EEPROM and are not lost when replacing the battery.

Note: the LED flashes at other times as normal even if disabled to flash during count.

Note: The packets are micro-randomized for 10 seconds +- 7 (1/4) second intervals.

# Packet Description

**IDSSSSSSSSooooooccccccCCCKK<CR>**

Note: All fields are in ASCII Hex

“ID”

The device type field: “2CountRange” has device type 9 hex. A 8 hex when in service mode.

“SSSSSSSS”

The MS-30 bits of these 4-bytes are the serial number of the sensor. The LS-2 bits are the status flags for the open and closed limit switches. The LS bit (bit-0) is the Open switch flag and the next most significant bit (bit-1) is the Closed switch flag.

For the *Point Sensor IR Counter(Old)* and *Point Sensor IR Proximity Counter*, the status bits have the following meaning:

Bit 1	Bit 0	State
0	0	Blocked
0	1	Open
1	0	Closed
1	1	Error

“oooooo”

This 24-bit field is the Open counter stored LS-byte first.

“cccccc”

**THE LOWER 22-BITS OF THE 24 BITS IS A DURATION COUNTER STORED LS-BYTE FIRST. THE DURATION COUNTER COUNTS THE NUMBER OF SECONDS THE BEAM IS OPEN (IN SECONDS). THE TOP 2 BITS (BITS 23 & 24) ARE USED IN INDICATE THE TYPE OF RANGE.**

Bit 1	Bit 0	State
0	0	Range1
0	1	Range2
1	0	Range3
1	1	Range4

**“CCCC”**

This field is the CRC-16 error check as was originally received and checked. This CRC is over the first 11 bytes of the packet starting with the device type and ending with but not including CRC-16.

“KK”

This field is the mod 256 sum of all the binary data values as represented by the ASCII hex values in the response but does not include the <CR>.

**In Beam :**

Select the desired in beam time requirement in ¼ second units to a max of 255 units.

**Out of Beam :**

Select the desired out of beam time requirement in ¼ second units to a max of 255 units.

**Blocked Time:**

Select the desired blocked time requirement in ¼ second units to a max of 255 units.

**Include Switch Data:**

Packet type enable/disable for automatic inclusion of the switch data.

YES= type "09", NO=type "11" (see packed definition above).

Note: changing device type will result in a changed serial number; two devices cannot be allowed to exist with identical serial numbers so when the device type is reprogrammed the serial number will be automatically changed as well.

**Allow LED to Flash on Count:**

Yes= LED will flash when people count advances. No= LED will not flash when people counter advances.

**IR Program:**

Press and hold the proximity sensor pushbutton for >8 seconds, aim the IR program transmitter at the Proximity IR sensor while clicking on the **IR Program** button. The LED on the proximity will flash to indicate success. Note: the proximity sensor will be in power down mode after an IR programming event.

**FCC ID: M5ZIRPROX2**  
**MADE IN USA**

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES, OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESERED OPERATION