Photoelectric Curtain Beam Sensor

- PHC-50L 2 Dual 4 Beams, H=0.5m
- PHC-100L 4 Dual 8 Beams, H=1.0m
- PHC-150L 6 Dual 12 Beams, H=1.5m
- PHC-200L 8 Dual 16 Beams, H=2.0m

Features:
- PHC-50L/100L/150L/200L is designed with 4/8/12/16 beams respectively for different demands in both indoor and outdoor.
- To prevent false alarm, two(2) beams cut synchronously is absolutely required for getting alarm output.
- Reliable mechanical structure design with protection against rain and insect.
- There are four(4) infrared output power on the transmitter unit for option according to the distance requirement.
- Red LED with alignment checking purpose to make installation job done properly.
- Buzzer JUMP setting with sound option during alarm initiated.
- Easy & quick installation.

1. PARTS DESCRIPTION

![Unit Base](Transmitter) ![Options](Mounting Plate)

2. CAUTIONS ON INSTALLATION

3. WIRING

4. INSTALLATIONS

- A. Wall Mounting
  4-1. Taking off the case cover from the both up/down side.
  4-2. To use screws 4x25mm(Self tapping) to fix PHC product on the wall.

Please read this instruction manual carefully for correct and effective use. If you do not understand these instructions, contact your supplier for further information.

This sensor is designed to detect intrusion and to activate an alarm. It only provides an alarm sign output, and is not an independent burglar-preventing device. If it's used abnormally, faulty installation, improper maintenance or Acts of God, it will cause damage.

Max. Distance 10m
4. INSTALLATIONS (count.)

4-3. Taking off the seal piece and wiring thru (Fig.4-2).
4-4. After wiring then setting the seal piece in (Fig.4-3).

4-5. Setting up proper IR power on the Transmitter according to the distance requirement (Table.4-1).

<table>
<thead>
<tr>
<th>IR power set</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance</td>
<td>2m</td>
<td>4m</td>
<td>6m</td>
<td>10m</td>
</tr>
</tbody>
</table>

(Buzzor JUMP JP1)

4-6. To supply the power, if the red LED flashing, that means, alignment is improper, Please adjust the position (angle) again.
4-7. Test if the action is in normal situation.
4-8. Turn Buzzer JUMP sound off (put JP1 into OFF)
4-9. Screw back the case covers for both up/down side carefully.

**B. Plate Mounting**
4-10. Firstly, to use screws 4x20mm (self tapping) to fix the mounting plate on the wall.
4-11. To use round top screws 4x16mm to fix PHC product on the mounting plate.
4-12. According to the procedure of 4-3~4-9 to finish the installation.

**OPERATION CHECK:**
Monthly check is required, operation testing by blocking the beam to see if alarm and LED (receiver) are initiated.

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**5. SPECIFICATIONS**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PHC-50L</th>
<th>PHC-100L</th>
<th>PHC-150L</th>
<th>PHC-200L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection Range</td>
<td>10m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Supply</td>
<td>10.5V~28VDC (12V is recommended)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TX Current</td>
<td>A=18mA</td>
<td>A=18mA</td>
<td>A=18mA</td>
<td>A=18mA</td>
</tr>
<tr>
<td></td>
<td>B=19mA</td>
<td>B=19mA</td>
<td>B=19mA</td>
<td>B=19mA</td>
</tr>
<tr>
<td></td>
<td>C=22mA</td>
<td>C=26mA</td>
<td>C=29mA</td>
<td>C=33mA</td>
</tr>
<tr>
<td></td>
<td>D=31mA</td>
<td>D=42mA</td>
<td>D=51mA</td>
<td>D=60mA</td>
</tr>
<tr>
<td>RX Current</td>
<td>23mA</td>
<td>25mA</td>
<td>27mA</td>
<td>29mA</td>
</tr>
<tr>
<td>No. of beams</td>
<td>2 dual 4 beams</td>
<td>4 dual 8 beams</td>
<td>6 dual 12 beams</td>
<td>8 dual 16 beams</td>
</tr>
<tr>
<td>Photoelectric</td>
<td>IR LED pulsed beam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detection</td>
<td>Breaking off 1 dual 2 beams or two adjacent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response Time</td>
<td>Breaking off 2 dual 4 beams (adjacent) : 50 msec.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Breaking off 1 dual 2 beams : 100 msec.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alarm Output</td>
<td>Dry connect relay : NC / NO. 0.2A / 28VDC (RX)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contact action : &gt;2 sec.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamper Output</td>
<td>Dry connect Micro-SW : NC. 0.2A / 28VDC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action : cover is detached (TX &amp; RX)</td>
<td></td>
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</tbody>
</table>
| Functions   | 1. Red LED ON: When an alarm is initiated (RX).
|              | 2. LED Flashing (RX): When receiver signal is weak.
|              | 3. Green LED ON: Power on (TX) |

- 1. Red LED OFF: When there is no alarm
- 2. Green LED OFF: Power off

**TEMPERATURE**
-13°F to +131°F (-25°C to +55°C)

**Mounting**
Indoor / Outdoor

**Wiring**
Terminals

**Accessories**
Screws (Self tapping 4 x 25mm) x 4.

**Option**
Mounting Plate x4
(Screws (M4X16mm) x 4 / Self tapping (4X20mm) x 8 )

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**6. DIMENSIONS**

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**NOTE:**
1. This unit is designed to detect an intruder and activate an alarm control panel. Being only a part of complete system, we cannot assume responsibility for theft or damages, should it occur.
2. Specifications and design are subject to change without prior notice.
3. Careful to install the product to prevent the damage.

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