

Centurion PHOTON1V2

PHOTON Wireless Photoelectric Sensors User Manual

Model: PHOTON1V2 | Brand: Centurion

PRODUCT OVERVIEW

The Centurion PHOTON infrared barrier photoelectric sensors are designed to provide an integral safety element for automated gate systems. The wireless transmitter, powered by two AA alkaline batteries, eliminates the need for extensive trenching and cabling, offering significant installation flexibility and reducing material and labor costs. This system ensures reliable operation and enhanced perimeter security for your property.



Image: Two Centurion Photon wireless photoelectric sensors, showcasing their sleek black design and compact form factor. These sensors are key components for automated gate safety systems.



Image: The Centurion Photon sensors are depicted in a composite image, highlighting their role in enhancing home security and safety, particularly for families with children, by preventing accidents at automated gates.

Key Features

- **Wireless Transmitter:** Battery-operated transmitter saves time and installation costs.
- **Long Battery Life:** Approximately 2 years of battery life using two AA alkaline batteries (included).
- **Extended Operating Range:** Up to 30 meters (98 feet) operating range, suitable for various gate sizes.

- **Durable Casing:** Ant-proof and weather-resistant housing ensures reliability in diverse environmental conditions.
- **Audible Feedback:** Transmitter provides audible feedback for easy setup and low battery indication.
- **Low Power Consumption:** Designed for energy efficiency across the entire system.
- **Installer Mode:** Features an installer mode with audible feedback for simplified alignment.
- **Compact Design:** Elegant and attractive construction, only 50mm wide.
- **Intruder Detection Compatibility:** Compatible with intruder detection alarms for enhanced perimeter security.

SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and safety of your PHOTON sensors. Follow these guidelines carefully.

Pre-Installation Checklist

- Ensure all components are present: Transmitter unit, Receiver unit, mounting hardware, 2 x AA alkaline batteries.
- Verify the gate area is clear of obstructions and suitable for sensor mounting.
- Confirm power supply (12V) is available for the receiver unit.

Mounting the Sensors

1. Choose a suitable mounting location on stable, vertical surfaces on either side of the gate opening. The sensors should be mounted at the same height, typically between 0.5m and 1m from the ground.
2. Securely attach the mounting brackets to the chosen surfaces using appropriate fasteners.
3. Mount the receiver unit on one side and the transmitter unit on the opposite side, ensuring they face each other directly.
4. Insert the two AA alkaline batteries into the transmitter unit.
5. Connect the receiver unit to the 12V power supply and the gate automation system's safety input terminals, following the gate system's specific wiring diagram.

Alignment Procedure

The PHOTON sensors feature an installer mode with audible feedback to assist with precise alignment.

1. Activate the installer mode on the transmitter (refer to the specific button/switch on the device, usually a small button on the side or back).
2. Adjust the angle of both the transmitter and receiver units until a continuous audible tone is heard from the transmitter. This indicates optimal alignment.
3. Once aligned, secure the sensors firmly in place.
4. Test the alignment by passing an object (e.g., your hand) through the beam path. The audible tone should stop, and the gate system's safety input should register the interruption.

OPERATING INSTRUCTIONS

Once installed and aligned, the PHOTON sensors operate automatically as a safety device for your automated gate.

Normal Operation

- The infrared beam continuously transmits between the receiver and transmitter.
- When the beam is uninterrupted, the gate automation system operates normally.

- If an object or person breaks the infrared beam while the gate is closing, the sensors will signal the gate automation system to stop or reverse, preventing potential injury or damage.
- The sensors are designed for continuous operation and require no user intervention during normal use.

Battery Status

The transmitter unit provides an audible indication for low battery levels. When you hear intermittent beeps from the transmitter during normal operation, it indicates that the batteries are nearing the end of their life and should be replaced promptly.

MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your PHOTON sensors.

Cleaning

- Periodically inspect the sensor lenses for dirt, dust, spiderwebs, or other obstructions.
- Clean the lenses gently with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- Ensure the area around the sensors is clear of vegetation or debris that could block the beam.

Battery Replacement

- When the transmitter indicates a low battery (audible beeps), replace both AA alkaline batteries immediately.
- Open the battery compartment on the transmitter unit.
- Remove the old batteries and dispose of them according to local regulations.
- Insert two new AA alkaline batteries, ensuring correct polarity.
- Close the battery compartment securely.
- After battery replacement, it is recommended to re-check the sensor alignment.

Functionality Test

- Regularly test the sensors by activating the gate and intentionally breaking the beam with an object (e.g., a cardboard box) to ensure the gate stops or reverses as expected.
- Perform this test at least once a month.

TROUBLESHOOTING

If you experience issues with your PHOTON sensors, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
Sensors not responding / Gate not stopping	<ul style="list-style-type: none">◦ Misalignment of sensors.◦ Obstruction in the beam path.◦ Low or dead batteries in transmitter.◦ No power to receiver.◦ Wiring issue to gate system.	<ul style="list-style-type: none">◦ Re-align sensors using installer mode.◦ Clear any obstructions from the beam path and sensor lenses.◦ Replace AA batteries in the transmitter.◦ Check 12V power supply to the receiver.◦ Verify wiring connections to the gate automation system.

Problem	Possible Cause	Solution
Transmitter beeping intermittently	<ul style="list-style-type: none">Low battery in transmitter.	<ul style="list-style-type: none">Replace both AA alkaline batteries in the transmitter.
False triggers / Gate stopping without obstruction	<ul style="list-style-type: none">Partial obstruction (e.g., spiderweb, tall grass).Sunlight directly hitting receiver lens.Interference from other infrared devices.	<ul style="list-style-type: none">Clean sensor lenses and clear surrounding area.Consider adding a small hood or shield to the receiver to block direct sunlight.Ensure no other IR devices are interfering with the beam.

SPECIFICATIONS

Attribute	Detail
Model Number	PHOTON1V2
Manufacturer	CENTURION SYSTEMS
Style	Wireless
Finish	Black
Material	Polymer
Shape	Oval
Power Source	Battery (Transmitter), 12V (Receiver)
Voltage	12 Volts
Installation Method	Surface Mounted
Coverage / Operating Range	30 Meters (approx. 98 feet)
Plug Profile	Wall
Special Features	Wireless, Audible Feedback, Installer Mode, Weather-resistant
Intended Use	Sensor for Automatic Gate Automation
Batteries Included	Yes (2 x AA)
Battery Type	AA Alkaline
Weight	300 Grams (approx. 0.66 lbs)
Package Dimensions	14 x 7.5 x 6 cm (approx. 5.5 x 3 x 2.4 inches)

WARRANTY AND SUPPORT

For warranty information and technical support, please contact Centurion Systems directly or refer to their official website.

- **Manufacturer:** CENTURION SYSTEMS
- **Website:** www.centsys.com
- **Product ASIN:** B09FNTBFCL


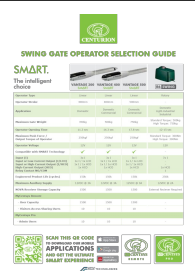
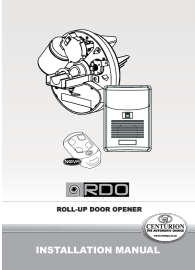
When contacting support, please have your product model number (PHOTON1V2) and ASIN (B09FNTBFCL) ready for faster assistance.



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Related Documents

	<p>Supports Anti-Soulèvement Centurion : Sécurisez Votre Portail Coulissant</p> <p>Découvrez les Supports Anti-Soulèvement Centurion, une solution robuste en acier conçue pour empêcher le soulèvement non autorisé des portails coulissants. Installation facile, durabilité et résistance aux intempéries pour une sécurité accrue de votre propriété.</p>
	<p>Centurion Swing Gate Operator Selection Guide</p> <p>A comprehensive selection guide for Centurion's SMART swing gate operators, detailing models like Vantage 300, 400, and 500, along with their specifications, features, and compatible accessories.</p>
	<p>Centurion RDO Roll-up Door Opener Installation Manual</p> <p>Comprehensive installation, settings, and troubleshooting guide for the Centurion RDO Roll-up Door Opener, including safety recommendations, operating controls, requirements, installation steps, adjustments, and technical specifications.</p>



Explore CENTURION's advanced sliding gate operators and SDO4 SMART garage door motors. This guide details smart access solutions for residential, commercial, and industrial needs, featuring technical specifications, key features, and selection criteria.

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