



English

# CLIP PG2

PowerG Wireless, Curtain, PIR Motion Detector



## Installation Instructions

### 1. INTRODUCTION

The CLIP PG2 is a small and elegant wireless curtain-pattern PIR detector for indoor use and designed for easy installation.

Modern technology is used to include 3 different detectors in a single case, each programmable for optimized performance at the specific mounting location. This results in better catch performance and virtually no false alarms.

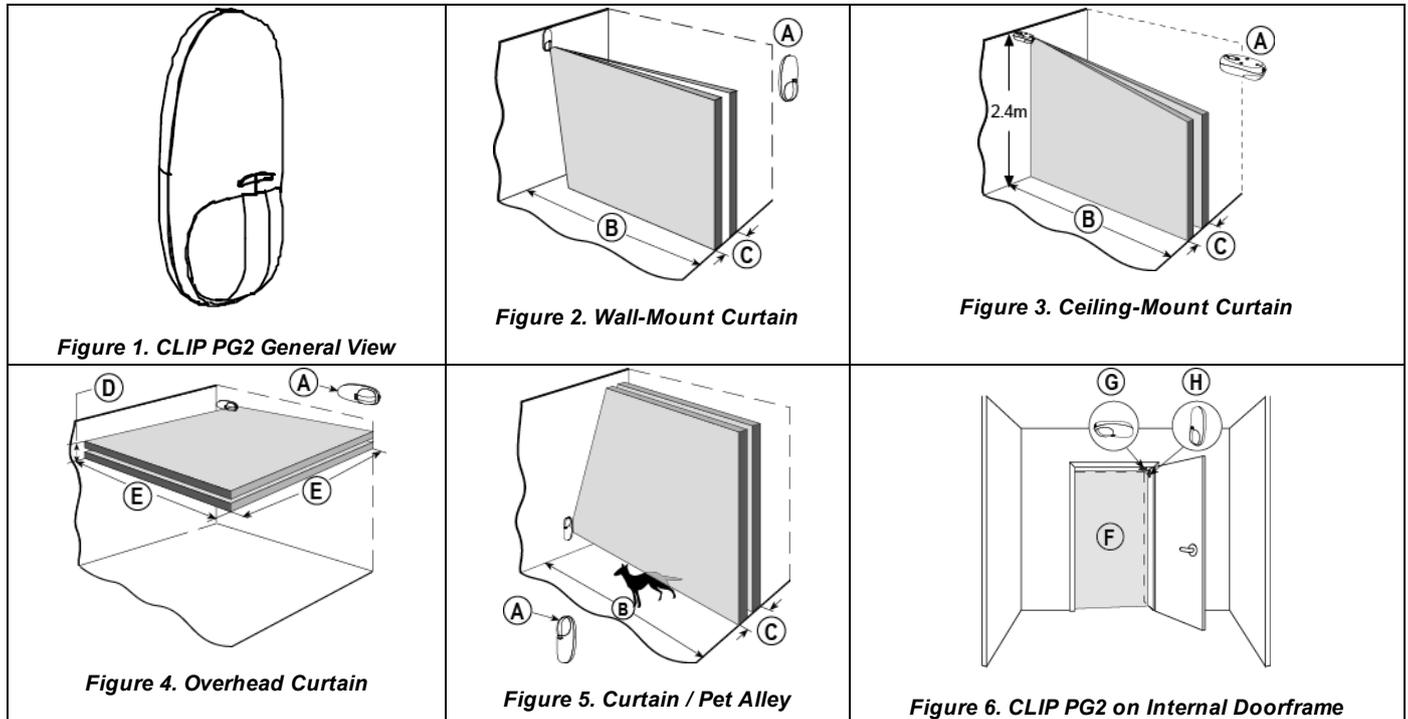
The superiority in performance of this detector is achieved by applying an improved version of the patented **True Motion Recognition™** (TMR) algorithm. This advanced motion analysis method allows the CLIP PG2 to distinguish between the true motion of the human body and any other disturbances that cause **false alarms**.

The CLIP PG2 includes the following features:

- For use with all PowerMaster® control panels (version 13 and higher).
- 2-way PowerG protocol communication
- Very low current consumption
- Microprocessor-controlled temperature compensation
- Sealed chamber protects the optical system
- Front cover tamper switch
- Optional back tamper switch
- White light protection
- Elegantly styled, sturdy case
- RF Link quality indication

Detailed coverage patterns and mounting alternatives are illustrated in [Figures 2 through 6](#).

**Note:** The pet immunity feature was not evaluated by UL.

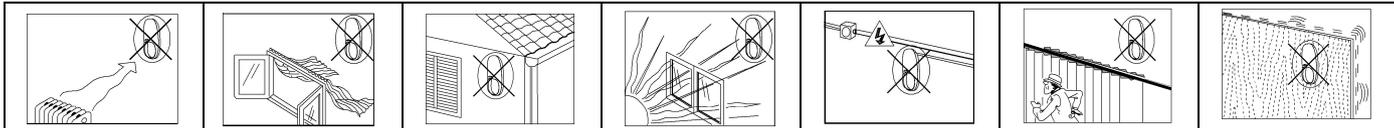


- A. This side up
- B. 6 m (20 ft) max. distance
- C. 1 m (3.3 ft) max. width
- D. 0.5 m (1.65 ft) max. width
- E. 3.6 m (12 ft) max. distance
- F. Detection curtain
- G. Option A
- H. Option B

## 2. INSTALLATION

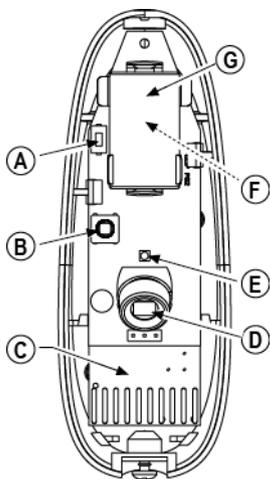
### 2.1. General Guidelines

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. Keep wiring away from power cables.</li> <li>2. Do not install behind partitions</li> <li>3. Mount on a solid stable surface.</li> </ol> | <ol style="list-style-type: none"> <li>4. Installed in accordance with NEC, NFPA 70.</li> <li>5. Installed in accordance with UL 681, Standard for Installations and Classifications of burglar and Holdup Alarm Systems.</li> </ol> |
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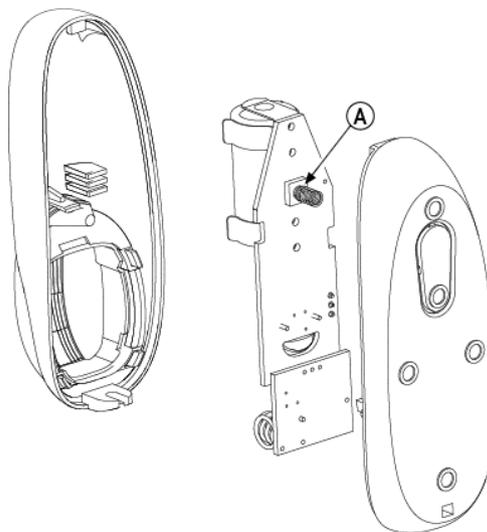
### 2.2. Regular Mounting

**Note:** Mount the detector so that its orientation is perpendicular to the expected intrusion path



- |                        |                                  |
|------------------------|----------------------------------|
| A. Enroll button       | E. LEDs                          |
| B. Front tamper switch | F. Back tamper switch (optional) |
| C. RF Module           | G. 3 Volt Lithium battery        |
| D. Sensor              |                                  |

**Figure 7. Internal View**



- A. Back tamper switch**  
A back tamper alert is activated when the base is detached from the wall.

**Figure 8. Back Tamper (Rear) View**

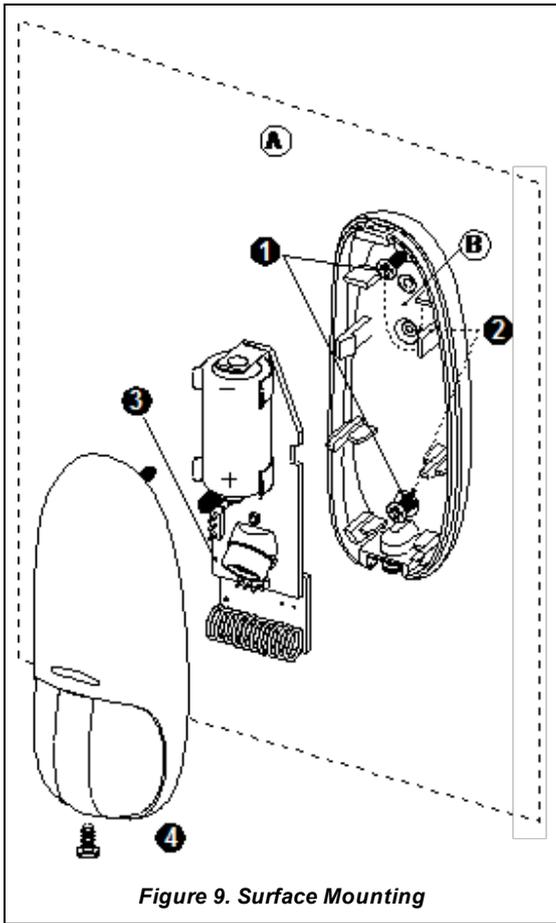


Figure 9. Surface Mounting

### Surface Mounting (see Figure 9)

1. Drill two holes in the mounting surface and secure the base with two screws.
2. For back tamper (optional) drill two holes and secure with two screws.
3. Position the PCB in its proper location within the base.
4. Insert the screw to secure the cover with the base.

A. Mounting surface                      B. Break-away segment

**Attention!** The back tamper switch becomes functional only when the break-away segment is secured to the wall with a screw.

#### Notes:

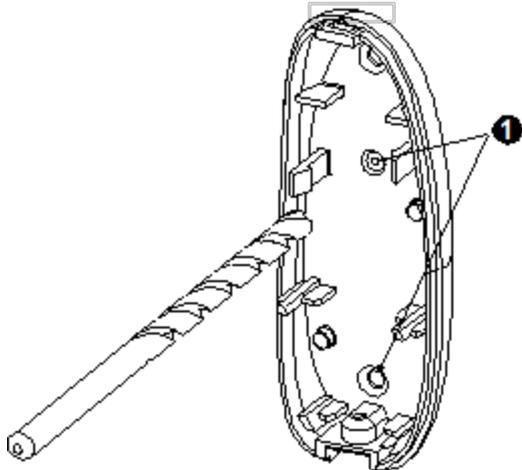
1. After mounting, be sure that no gaps remain in the detector housing. For example, in the area around the screw holes.
2. Remove the battery using your fingers, and not with a screwdriver.
3. Back Tamper must be used for EN installations.

**Caution!** Risk of explosion if battery is replaced by an incorrect type. Dispose of used battery according to manufacturer's instructions.

## 2.3. Bracket Mounting

**Note:** Mount the detector so that its orientation is perpendicular to the expected intrusion path.

**Note:** When mounting using the bracket, the back tamper becomes inoperative.



1. Drill two 7 mm (1/4") holes at the marked locations

Figure 10. Drilling Holes

1. Drill two holes in the mounting surface.
2. Secure the bracket with two screws.

A. Mounting surface  
B. Top view

#### Note:

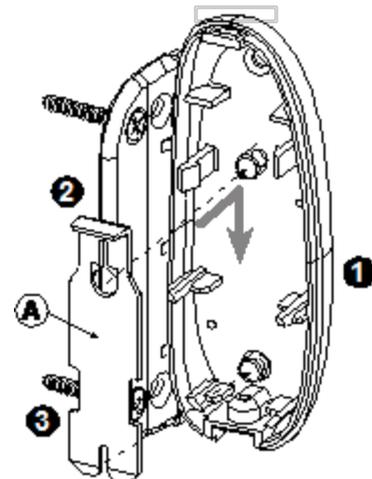
The bracket provides two mounting options

For optimum angle coverage:

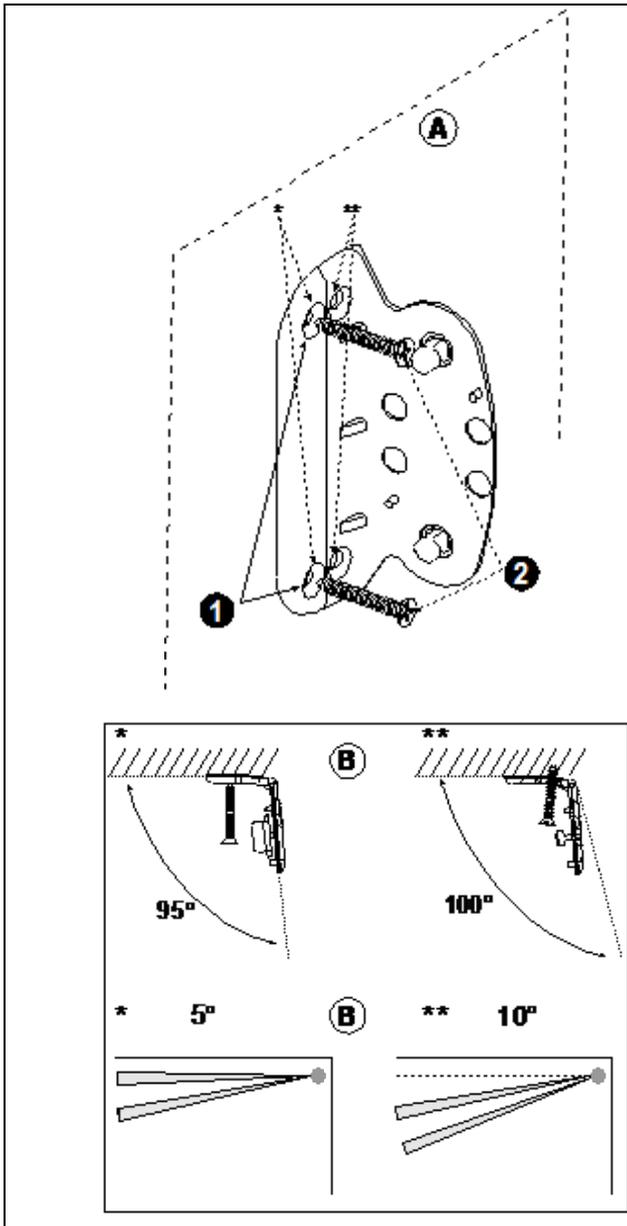
\* use these two holes to shift the coverage angle by 5° away from the wall

\*\* use these two holes to shift the coverage angle by 10° away from the wall

Figure 11. Mounting Bracket to Surface



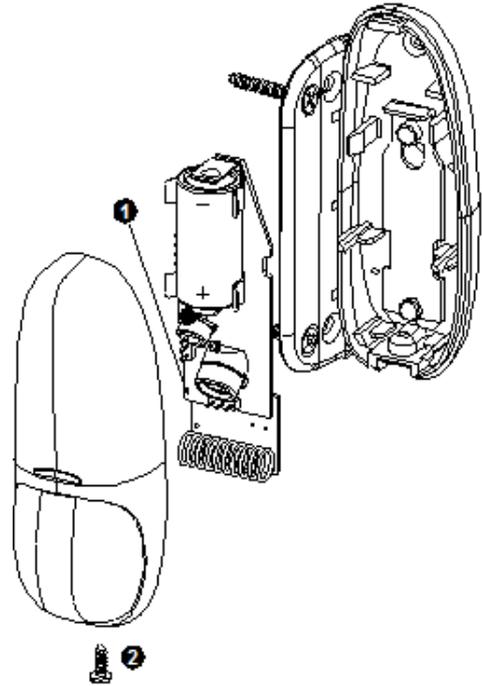
1. Place the base slots over the two bracket pins.



2. Place the locking plate over the two pins.
3. Secure the locking plate by pressing downward.

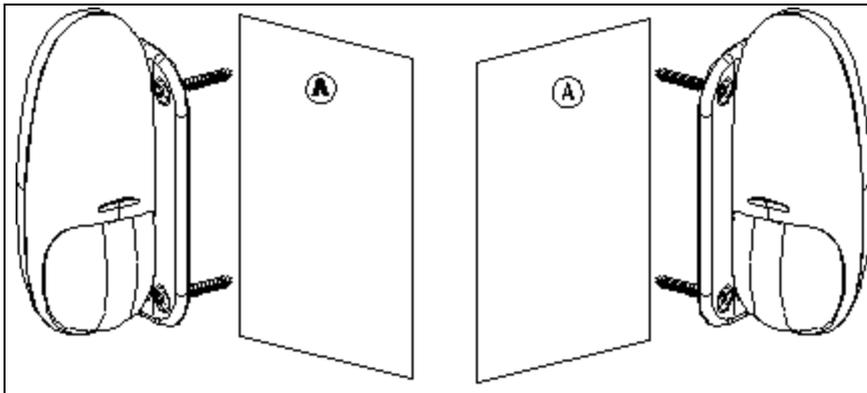
A. Locking plate

**Figure 12. Securing Locking Plate to Base**



1. Position the PCB correctly in the base.
2. Insert the screw to secure the cover with the base.

**Figure 13. Mounting Cover to Base**

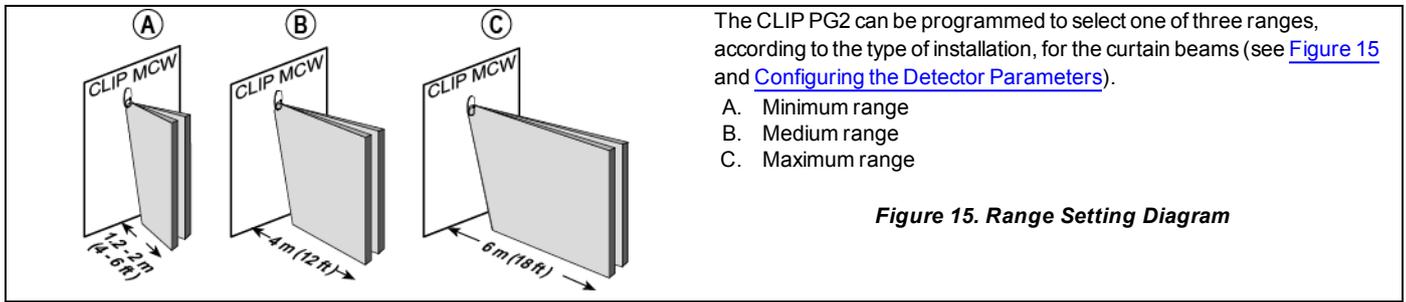


A. Window

**Note:** The CLIP PG2 can be mounted on either side of a window.

**Figure 14. Mounting on Both Sides of a Window**

## 2.4. Setting the Coverage Range



## 2.5. Walk Testing

- A. Mount the cover and tighten the screw. Wait for the detector to stabilize (the LED stops flashing approx. 1 minute after the cover is closed).
- B. Walk slowly across the far end of the curtain pattern in the opposite direction. The LED indicator lights for approximately 3 seconds whenever you enter or exit a curtain beam.

**Important!** Important: Perform walk test at least once a week to assure proper function of the detector.

**Note:** After closing the cover the detector enters a 15 minute walk test mode. In this mode the LED flashes each time a detection occurs, regardless of the LED jumper settings, and the detector transmits on the occurrence of each detection event.

## 2.6. Enrollment

Refer to the PowerMaster panel's Installer Guide and follow the procedure under the "02:ZONES/DEVICES" option of the Installer Menu. A general description of the procedure is provided in the following flow chart.

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Enter the Installer menu and select "02:ZONES/DEVICES"	Select "ADD NEW DEVICE" Option. See Note [1]	Enroll the device or Enter the device ID	Select the desired Zone Number	Configure Location, Zone Type & Chime Parameters	Configure the Detector
<b>02.ZONES/DEVICES</b> ⇒	<b>ADD NEW DEVICES</b> ⇒ ↓ <b>MODIFY DEVICES</b>	<b>ENROLL NOW</b> or <b>ENTR ID:XXX-XXXX</b>	⇒ <b>Z03:Motion Sens</b> ID No. 122-XXXX	⇒ <b>Z03:LOCATION</b> <b>Z03.ZONE TYPE</b> <b>Z03:SET CHIME</b> <b>Z03:DEV SETTINGS</b>	⇒
⇒means scroll ▷▷and select OK.					<b>See Note [2]</b>

### Notes:

1. If the detector is already enrolled you can configure the keyfob parameters via the "Modify Devices" option – see Step 2.
2. Select the "Device Settings" option and refer to [Configuring the Detector Parameters](#) to configure the detector parameters.

## 2.7. Configuring the Detector Parameters

Enter the **DEVICE SETTINGS** menu and follow the configuration instructions for the CLIP PG2 curtain detector as described in the following table.

Option	Configuration Instructions
<b>Alarm LED</b>	Determine whether or not to activate the alarm LED indication. Optional settings: LED ON (default) and LED OFF.
<b>PIR RANGE</b>	Select one of the three ranges, according to the type of installation, for the curtain beams. Select "Maximum" for a range of 6 m, select "Medium" for a range of 4 m, or select "Minimum" for a range of 2 m. Optional settings: Maximum (default), Medium and Minimum.
<b>DISARM Activity</b>	Define whether or not to set the activity time during disarm. Optional settings: NOT Active (default), YES – no delay, YES + 5s delay, YES + 15s delay, YES + 30s delay, YES + 1m delay, YES + 2m delay, YES + 5m delay, YES + 10m delay, YES + 20m delay and YES + 60m delay.

### 3. LOCAL DIAGNOSTICS TEST

**Note:** Run a diagnostic test at least once a year to ensure that the detector is working correctly.

- Separate the base from the cover (see [Fig. 8](#)).
- Put back the cover to return the tamper switch to its normal (undisturbed) position, and then secure the front cover to the base with the case closure screw (see [Fig. 9](#)).
- The CLIP PG2 enters a 1 minute stability period. During this time the red LED blinks.
- Walk-test the coverage area. Walk across the far end of coverage pattern in both directions, The red LED lights each time your motion is detected followed by 3 LED blinks.

The following table indicates received signal strength indication.

LED response	Reception	<b>Important!</b> Reliable reception must be assured. Therefore, "poor" signal strength is not acceptable. If you receive a "poor" signal from the detector, re-locate it and re-test until a "good" or "strong" signal strength is received (in regions requiring UL-compliant installation, only "strong" signal strength is permitted).  1. For detailed Diagnostics Test instructions refer to the control panel Installer Guide. 2. For UL/CUL installations, the test result must be "Strong".
Green LED blinks	Strong	
Orange LED blinks	Good	
Red LED blinks	Poor	
No blinks	No communication	

### 4. SPECIAL COMMENTS

Even the most sophisticated detectors can sometimes be defeated or may fail to warn due to: DC power failure / improper connection, malicious masking of the lens, tampering with the optical system, decreased sensitivity in ambient temperatures close to that of the human body and unexpected failure of a component part.

The above list includes the most common reasons for failure to detect intrusion, but is by no means comprehensive. It is therefore recommended that the detector and the entire alarm system be checked weekly, to ensure proper performance.

An alarm system should not be regarded as a substitute for insurance. Home and property owners or renters should be prudent enough to continue insuring their lives and property, even though they are protected by an alarm system.

### 5. COMPLIANCE WITH STANDARDS



**Europe:** EN 300220, EN 301489, EN 50130-4, EN 60950-1, EN 50130-5, EN 50131-2-2, EN 50131-5-3, EN 50131-6.

Hereby, Visonic Ltd. declares that the radio equipment type CLIP PG2 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:  
<http://www.visonic.com/download-center>.

**EN 50131-1 Security Grade** According to EN 50131-1:2006 and A1:2009, this equipment can be applied in installed systems up to and including Security Grade 2.

**EN 50131-1** Class II

**Environmental Class**

*The Power G peripheral devices have two-way communication functionality, providing additional benefits as described in the technical brochure. This functionality has not been tested to comply with the respective technical requirements and should therefore be considered outside the scope of the product's certification.*

Certified by Applica Test & Certification AS in accordance with EN 50131-2-2, EN 50131-6, EN 50131-5-3, EN 50130-4, and EN 50130-5.

Applica T&C has certified only the 868 MHz variant of this product.

**UK:** This product is suitable for use in systems installed to conform to PD6662:2010 at Grade 2 and environmental class 2. DD243 and BS8243

**USA:** FCC-CFR 47 Part 15, UL-639

**Canada:** IC-RSS 210, ULC-S306-03



#### FCC Compliance Statement

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio and television reception.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

- Re-orient or re-locate the receiving antenna.
- Increase the distance between the device and the receiver.
- Connect the device to an outlet on a circuit different from the one which supplies power to the receiver.
- Consult the dealer or an experienced radio/TV technician

**Warning!** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Warning!** To comply with FCC and IC RF exposure compliance requirements, the device should be located at a distance of at least 20 cm from all persons during normal operation. The antennas used for this product must not be co-located or operated in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules and RSS-210 of Industry and Science Canada. 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 undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



**W.E.E.E. Product Recycling Declaration**

For information regarding the recycling of this product you must contact the company from which you originally purchased it. If you are discarding this product and not returning it for repair then you must ensure that it is returned as identified by your supplier. This product is not to be thrown away with everyday waste.  
Directive 2002/96/EC Waste Electrical and Electronic Equipment.

## APPENDIX: SPECIFICATIONS

### OPTICAL

<b>Detector Type</b>	Dual element low-noise pyroelectric sensor
<b>Number of Curtain Beams</b>	2
<b>Mounting Positions</b>	See <a href="#">Figures 2 through 6</a>
<b>Range Settings</b>	Maximum (6 m), Medium (4 m) and Minimum (1.2 – 2m) (remotely selected)

### ELECTRICAL

<b>Internal Battery</b>	3V Lithium battery, type CR-123A or equivalent <b>Notes:</b> <ol style="list-style-type: none"><li>Use only the above battery type.</li><li>For UL installations use Gold Peak (GP) or Panasonic CR123A only.</li></ol>
<b>Nominal Battery Capacity</b>	1450 mA/h
<b>Low Battery Threshold</b>	2.45 V
<b>Battery Life (for typical use)</b>	7 years

### FUNCTIONAL

<b>Visual indications:</b>	<b>Red LED lights</b> for about 2 seconds upon motion detection in the walk test mode and for about 0.2 sec. for tamper messages. <b>Red LED blinks</b> during the power-up stabilization period (approx. 1 min), or after restoring the cover (by pressing the tamper switch). <b>Red LED does not light</b> upon transmission of supervision messages.
<b>Alarm Period</b>	Approx. 2 seconds

### WIRELESS

<b>Frequency Band (MHz)</b>	<b>Europe and rest of world:</b> 433-434, 868-869 <b>USA:</b> 912-919
<b>Maximum Tx Power</b>	10 dBm @ 433 MHz, 14 dBm @ 868 Mhz
<b>Communication Protocol</b>	PowerG
<b>Supervision</b>	Signaling at 4-min. intervals
<b>Tamper Alert</b>	Reported when a tamper event occurs and in any subsequent message, until the tamper switch is restored

### MOUNTING

<b>Height</b>	1.8 - 2.4 m (6 - 8 ft).
<b>Installation Options</b>	See <a href="#">Figures 9 through 13</a>

### ACCESSORIES

**BR-1:** Surface mounted swivel bracket, adjustable 30° down and 45° left/45° right.  
**BR-2:** BR-1 with a corner adapter  
**BR-3:** BR-1 with a ceiling adapter  
**Note:** UL did not evaluate the product with the use of the BR brackets

### ENVIRONMENTAL

<b>RFI Protection</b>	>20 V/m up to 2000 MHz, excluding inband frequencies
<b>Operating Temperatures</b>	-10°C to 50°C (14°F to 122°F) indoor <b>Note:</b> UL tested 0°C to 49°C
<b>Storage Temperatures</b>	-20°C to 60°C (-4°F to 140°F)
<b>Humidity</b>	Average relative humidity of approximate 75% non-condensing. For 30 days per year relative humidity may vary between 85 % and 95 % non-condensing. <b>Note:</b> For UL installations, relative humidity is 85%.

### PHYSICAL

<b>Size (H x W x D)</b>	105 x 35 x 30 mm (4-1/8 x 1-3/8 x 1-3/16")
<b>Weight (with battery)</b>	60 g (2.1 oz).
<b>Color</b>	White

### PATENTS

U.S. Patents 5,693,943 • 6,211,522 • D445,709 (another patent pending)

## WARRANTY

Visonic Limited (the "Manufacturer") warrants this product only (the "Product") to the original purchaser only (the "Purchaser") against defective workmanship and materials under normal use of the Product for a period of twelve (12) months from the date of shipment by the Manufacturer.

This Warranty is absolutely conditional upon the Product having been properly installed, maintained and operated under conditions of normal use in accordance with the Manufacturers recommended installation and operation instructions. Products which have become defective for any other reason, according to the Manufacturers discretion, such as improper installation, failure to follow recommended installation and operational instructions, neglect, willful damage, misuse or vandalism, accidental damage, alteration or tampering, or repair by anyone other than the manufacturer, are not covered by this Warranty.

There is absolutely no warranty on software, and all software products are sold as a user license under the terms of the software license agreement included with such Product."

The Manufacturer does not represent that this Product may not be compromised and/or circumvented or that the Product will prevent any death and/or personal injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. The Product, properly installed and maintained, only reduces the risk of such events without warning and it is not a guarantee or insurance that such events will not occur.

**Conditions to Void Warranty:** This warranty applies only to defects in parts and workmanship relating to normal use of the Products. It does not cover:

- \* damage incurred in shipping or handling;
- \* damage caused by disaster such as fire, flood, wind, earthquake or lightning;
- \* damage due to causes beyond the control of the Seller such as excessive voltage, mechanical shock or water damage;
- \* damage caused by unauthorized attachment, alterations, modifications or foreign objects being used with or in conjunction with the Products;
- \* damage caused by peripherals (unless such peripherals were supplied by the Seller;
- \* defects caused by failure to provide a suitable installation environment for the products;
- \* damage caused by use of the Products for purposes other than those for which they were designed;
- \* damage from improper maintenance;
- \* damage arising out of any other abuse, mishandling or improper application of the Products.

**Items Not Covered by Warranty:** In addition to the items which void the Warranty, the following items shall not be covered by Warranty: (i) freight cost to the repair centre; (ii) customs fees, taxes, or VAT that may be due; (iii) Products which are not identified with the Seller's product label and lot number or serial number; (iv) Products disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection or testing to verify any warranty claim. Access cards or tags returned for replacement under warranty will be credited or replaced at the Seller's option.

THIS WARRANTY IS EXCLUSIVE AND EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES, WHETHER WRITTEN, ORAL, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE. IN NO CASE SHALL THE MANUFACTURER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS WARRANTY OR ANY OTHER WARRANTIES WHATSOEVER, AS AFORESAID.

THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OR FOR LOSS, DAMAGE, OR EXPENSE, INCLUDING LOSS OF USE, PROFITS, REVENUE, OR GOODWILL, DIRECTLY OR INDIRECTLY ARISING FROM PURCHASER'S USE OR INABILITY TO USE THE PRODUCT, OR FOR LOSS OR DESTRUCTION OF OTHER PROPERTY OR FROM ANY OTHER CAUSE, EVEN IF MANUFACTURER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE MANUFACTURER SHALL HAVE NO LIABILITY FOR ANY DEATH, PERSONAL AND/OR BODILY INJURY AND/OR DAMAGE TO PROPERTY OR OTHER LOSS WHETHER DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, BASED ON A CLAIM THAT THE PRODUCT FAILED TO FUNCTION. HOWEVER, IF THE MANUFACTURER IS HELD LIABLE, WHETHER DIRECTLY OR INDIRECTLY, FOR ANY LOSS OR DAMAGE ARISING UNDER THIS LIMITED WARRANTY, THE MANUFACTURER'S MAXIMUM LIABILITY (IF ANY) SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT INVOLVED, WHICH SHALL BE FIXED AS LIQUIDATED DAMAGES AND NOT AS A PENALTY, AND SHALL BE THE COMPLETE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THESE LIMITATIONS MAY NOT APPLY UNDER CERTAIN CIRCUMSTANCES.

When accepting the delivery of the Product, the Purchaser agrees to the said conditions of sale and warranty and he recognizes having been informed of.

The Manufacturer shall be under no liability whatsoever arising out of the corruption and/or malfunctioning of any telecommunication or electronic equipment or any programs.

The Manufacturers obligations under this Warranty are limited solely to repair and/or replace at the Manufacturer's discretion any Product or part thereof that may prove defective. Any repair and/or replacement shall not extend the original Warranty period. The Manufacturer shall not be responsible for dismantling and/or reinstallation costs. To exercise this Warranty the Product must be returned to the Manufacturer freight pre-paid and insured. All freight and insurance costs are the responsibility of the Purchaser and are not included in this Warranty.

### For sales in Israel only:

The Purchaser shall comply with the provisions of the Israeli Consumer Protection Law – 1981 ("Consumer Protection Law") related regulations, including the Israeli Consumer Protection Regulations (Warranty Sticker), 5772-2012 ("Regulations"), including, without limitation (i) providing its

customers with at least the minimum warranty required by the Consumer Protection Law, and (ii) ensuring that a warranty certificate and a warranty sticker (as defined in the Regulations) ("Warranty Sticker") shall be attached to any sold Products and the date of the sale of the Product to the consumer or the end-user shall be added in a readable manner on the Warranty Sticker.

In no event shall the Purchaser's compliance with the Consumer Protection Law and Regulations expand any of the Manufacturer's warranty obligations under this warranty, and the Purchaser shall be responsible for any warranty that it provides with respect to the Products which exceeds or is different from this warranty.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products. This Warranty is exclusive to the original Purchaser and is not assignable.

This Warranty is in addition to and does not affect your legal rights. Any provision in this warranty which is contrary to the Law in the state or country where the Product is supplied shall not apply.

**Governing Law:** This disclaimer of warranties and limited warranty are governed by the domestic laws of Israel.

#### **Warning**

The user must follow the Manufacturer's installation and operational instructions including testing the Product and its whole system at least once a week and to take all necessary precautions for his/her safety and the protection of his/her property.

\* In case of a conflict, contradiction or interpretation between the English version of the warranty and other versions, the English version shall prevail.



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