# **Elpas Curtain PIR Detector**

P/N: 5-PIR00433

# **Installation Guide**

### Introduction

This installation guide provides basic instructions for common Curtain PIR Detector installation scenarios.

**CAUTION!** It is important that you read, understand, and follow the instructions in this document. If you have questions, call your local Elpas support representative.

### **Product Description**

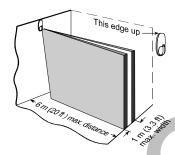
The Elpas Curtain PIR Detector is a battery operated; wireless curtain type PIR for protecting interior doors, walls, ceilings, windows and skylights as well as glass displays in residential, commercial and light industrial environments designed for use in Elpas Safety, Security and Visibility systems

The detector provides horizontal or vertical curtain-shape, passive—infrared perimeter coverage up to 6m x 1m (20ft x 3.5ft) and additionally can also be used as an internal invisible barrier to detect movement between two adjoining areas.

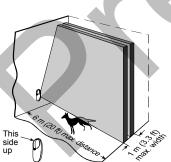
The Curtain PIR Detector is engineered to continuously measure the ambient temperature of all objects within its field of view. Any rapid or differential change in temperature triggers the detector to transmit identifiable coded alarm RF messages which can be used to alert security personal of a possible intruder in the protected area.

To ensure maximum security reliability, the detector supports remote supervision to protect against unauthorized tampering, unapproved removal or of a dead battery condition. Small in size and weight, Curtain PIR Detector is easily fastened to walls or ceilings and delivers three years of dependable service between battery changes.

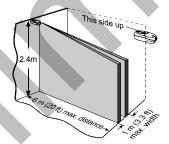
### **Coverage Patterns & Mounting Alternatives**



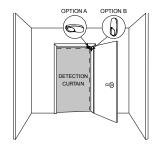
Wall-Mount Curtain



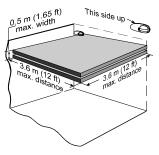
Curtain / Pet Alley



Ceiling-Mount Curtain



CLIP MCW on Internal Doorframe



Overhead Curtain



#### **Tamper Switch**

The PIR Detector contains two spring loaded tamper switch that when pressed, generates a 'State' message that is useful for registering the detector in the host Elpas RTLS application.

(Refer to the Eiris Configuration Guide for enrolling transmitter IDs.)

Once registered, the tamper switch can also be used as an input trigger for a device supervision tamper alert indicating non-authorized attempts to remove the device's cover.

#### **Power**

The PIR Detector derives its power from one CR2430 type lithium battery (factory supplied).

**IMPORTANT:** The Wireless Input Module as well as all the input devices to be monitored should be powered down when wiring in order to prevent accidental shorts/spikes to cause damage to any of the devices.

### **Supported Event Transmissions**

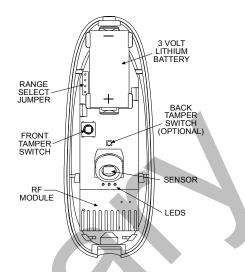
The Magnetic Contact Transmitter can transmit state changes from up to two dry contact inputs (as a button press event message) to the host RTLS server.

- Input 1 Button 1 Event
- Input 2 Button 2 Event

The input module can also transmit a state change from the tamper switch (as a motion event message) indicating a non-authorized attempt to remove the module's cover.

• Tamper Switch - Motion Event

**Note:** Whenever a state change is detected the input module automatically transmits 4 RF event messages 400ms apart with each transmission about 2ms in duration).



### Status Indicator

The Magnetic Contact Transmitter has a Red Status LED that flashes once/second signaling either a low voltage condition or that the device is transmitting.

### Lithium Battery Installation (supplied with device)

Before inserting the CR2430 type lithium battery into the module's battery holder, confirm that the holes of the battery Isolator are aligned with the contact pins. Then ensure that the positive (+) side of the battery faces the PCB.

**IMPORTANT:** Inserting the 1/2AA battery improperly into the battery clip may cause damage to the Wireless Input Module.

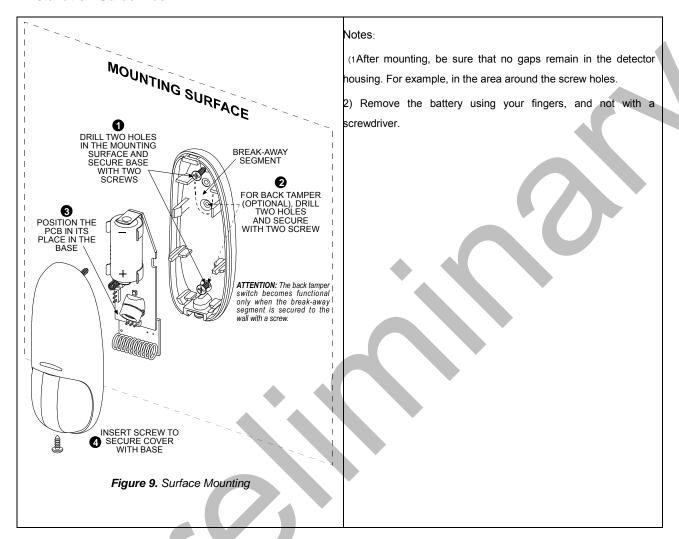
### **Product Specifications**

Signaling Technologies	RF (433MHz)
Transmission Rate	Every 60 seconds
Device Inputs	1 analog dry contacts and one reed switch
Supervised Events	Low Battery, Tamper
Power Source	3.6V/1.2Ah Lithium Battery, LiSOCI2 size 1/2 AA
Average Battery Life	Approximately 3 years
LED Indicator	Low Battery, Device Transmission
Badge ID	Unique, factory-programmed ID
Construction	White polycarbonate plastic
Dimensions (H x W x D)	81 x 22 x 23.5 mm (3-3/16 x 7/8 x 15/16 in.)
Weight	Reed Switch (excluding battery): 34 grams (1.2 ounces) Magnet: 13 grams (0.45 ounces)
Operating Environment	Temp: 0°C to 49°C (32°F to 120°F) Humidity: 90% non-condensing
Remote Management	Eiris 4.8 (or higher) Elpas Configurator 4.8 (or higher) ELC Programmer V2.0
Standards	IC, FCC & CE compliant
Warranty	1 year limited warranty (excluding battery)

Product offerings and specifications are subject to change without notice. Not all products include all features



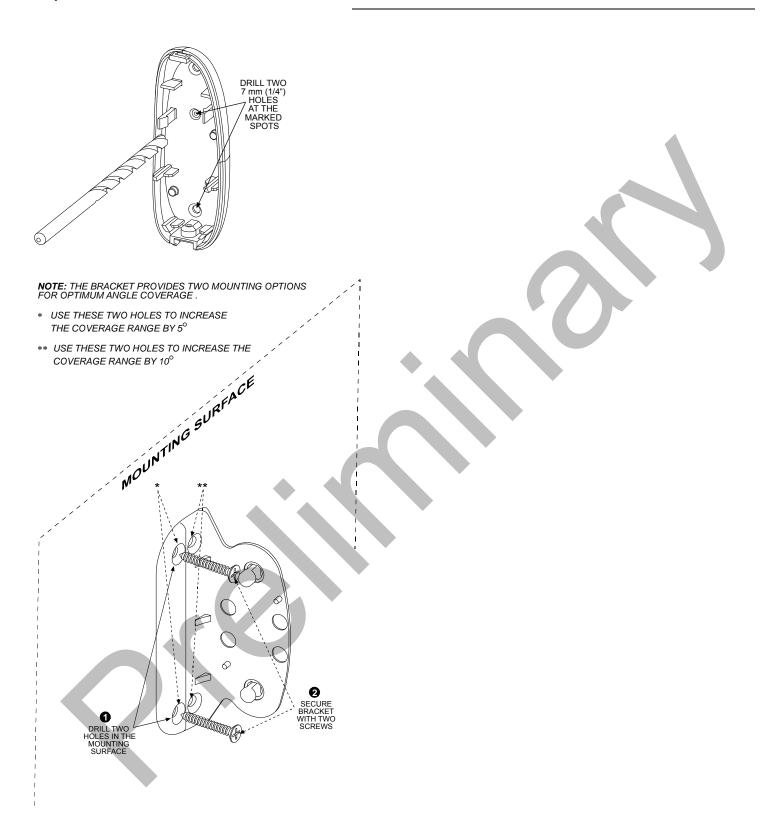
### **Installation Guidelines**



## **Bracket Mounting**

Note: When mounting using the bracket, the back tamper is not functional.







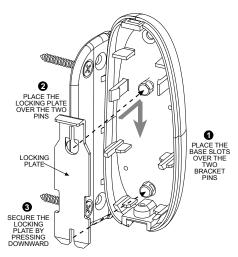
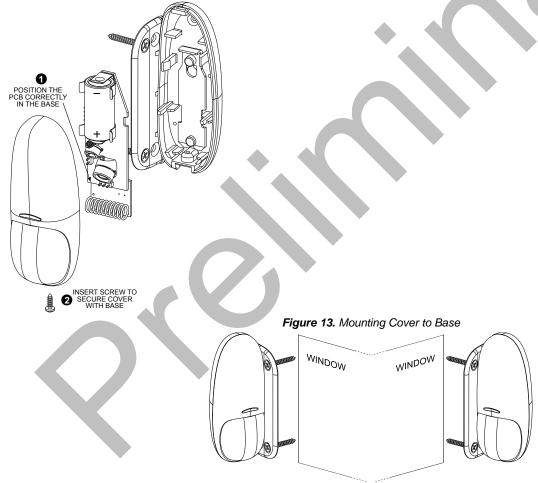


Figure 12. Securing Locking Plate to Base



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

Figure 14. Mounting on Both Sides of a Window



### **Setting the Coverage Range**

A 4-pin jumper is used to select 3 ranges, according to the type of installation, for the curtain beams (see Figures 7 and 15).

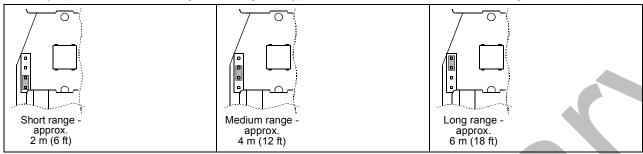


Figure 15. Range Jumper Settings

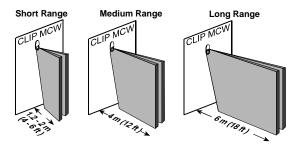


Figure 16. Range Setting Diagram

The purpose of the range setting is to ensure optimal signal processing and high immunity against false alarms.

Mount the range jumper in the desired position and make sure that the protected area is within the selected coverage range (see figure 16). Carry out a walk test (refer to Para. 3.5) to verify proper performance.

### **Walk Testing**

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

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 will flash each time a detection occurs, regardless of LED jumper settings, and the detector will transmit on the occurrence of each detection event.



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#### **EU Declaration of Conformity**

This equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC

#### FCC & IC Compliance Standards

This device (FCC ID#: O4X5-PIR00433 and IC ID#:1467G-5PIR00433) complies with FCC Rules Part 15 and with Industry Canada license-exempt RSS standard(s). Operation is subject to two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may be received or that may cause undesired operation.

For Industry Canada: 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.

Note: This equipment 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 a residential installation. 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 communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Changes or modifications to this equipment not expressly approved by the party responsible for compliance (Elpas Solutions Ltd.) could void the user's authority to operate the equipment.

This equipment complies with FCC and IC RF radiation exposure limits set forth for an uncontrolled environment.

### **Company Contact**

Elpas, Inc. Westford, Massachusetts (USA)

Tel: 1-800-223-0020

#### **Product Warranty**

Elpas Solutions, Ltd. (the Company), and its affiliates, warrants its products (hereinafter referred to as "the Product") to be free of defects in materials and workmanship under normal operating conditions and use for a period of one year from the date of shipment by Elpas. The Company's obligations shall be limited within the warranty period, at its option, to repair or to replace the defective Product or any defective component or part thereof. To exercise this warranty, the product must be returned to the manufacturer freight prepaid and insured.

This warranty does not apply to repairs or replacement caused by improper installation, Product misuse, failure to follow installation or operating instructions, alteration, abuse, accident, tampering, repair by anyone other than Elpas, external causes, and failure to perform required preventive maintenance. This warranty also does not apply to any products, accessories, or attachments used in conjunction with the Product, including batteries, which shall be covered solely by their own warranties, if any. Elpas shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, resulting from a malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Product.

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Elpas shall have no liability for any death, personal injury, property damage, or other loss whether direct, incidental, consequential, or otherwise, based on a claim that the Product failed to function. However, if Elpas is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, the company's maximum liability shall be limited to the purchase price of the Product, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive liability of Elpas.

Elpas shall not, under any circumstances whatsoever, be liable for any inaccuracy, error of judgment, default, or negligence of Elpas, its employees, officers, agents, or any other party, or of the purchaser or user, arising from any assistance or communication of any kind regarding the configuration, design, installation, or creation of security system involving the Product, that being the responsibility of the purchaser or user. If Elpas is unable to make such repair or replacement, the company's entire liability shall be limited to the cost of a reasonable substitute product. Elpas shall not be responsible for any dismantling, installation, reinstallation, purchasing, shipping, insurance, or any similar charges.

Elpas shall have no liability for any damages, including without limitation, any direct, indirect, incidental, special, or consequential damages, expenses, costs, profits, lost savings or earnings, or other damages arising out of the use of the Product or the removal, installation, reinstallation, repair or replacement of the Product or any related events. In the event that there is any liability against Elpas, such liability shall be limited to the purchase price of the Product which amount shall be fixed as liquidated damages.

The purchaser and user understand that this Product may be compromised or circumvented by intentional acts; that the Product will not in all cases prevent death, personal injury, property damage, or other loss resulting from burglary, robbery, fire or other causes; and that the Product will not in all cases provide adequate warning or protection. The purchaser and user also understand that a properly installed and maintained alarm may reduce the risk of events such as burglary, robbery, and fire without warning, but it is not insurance or a guarantee that such events will not occur or that there will be no death, personal injury, property damage, or other loss as a result of such events.

By purchasing the Product, the purchaser and user shall defend, indemnify and hold Elpas, its officers, directors, affiliates, subsidiaries, agents, servants, employees, and authorized representatives harmless from and against any and all claims, suits, costs, damages, and judgments incurred, claimed, or sustained whether for death, personal injury, property damage, or otherwise, because of or in any way related to the configuration, design, installation, or creation of a security system involving the Product, and the use, sale, distribution, and installation of the Product, including payment of any and all attorney's fees, costs, and expenses incurred as a result of any such events.

The purchaser or user should follow the Product installation and operation instructions and test the Product and the entire system at least once each week. For various reasons, including but not limited to changes in environmental conditions, electric, electronic, or electromagnetic disruptions, and tampering, the Product may not perform as expected. The purchaser and user are advised to take all necessary precautions for the protection and safety of persons and property.

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Elpas reserves the right to modify this statement at any time, in its sole discretion without notice to any purchaser or user. However, this statement shall not be modified or varied except by Elpas in writing, and Elpas does not authorize any single individual to act on its behalf to modify or vary this statement.

Any questions about this statement should be directed to Elpas.



