



## Instructions

**SECURITY SYSTEMS**  
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## English

Select the detector's installation site, based on the required coverage and recommended height of 2.1m (7ft). Avoid proximity to any of the following: reflective surfaces, direct air flow from vents, fans and windows; sources of steam/oil vapor; objects causing temperature changes such as heaters, refrigerators, ovens; and infrared light sources.

For CUL Listed applications, the unit shall be installed in accordance with Part I of the Canadian Electrical Code.

The detector comes equipped with the Paradox wide angle (WA-1) standard lens. For more information on the full range of Paradox lenses, visit our web site at [www.paradox.ca](http://www.paradox.ca). If another lens pattern is required, choose the desired lens and:

- remove front cover of the detector by gently pushing in the cover pin with a screwdriver.
  - pull out the bezel by lightly pressing on bezel pins.
  - remove the lens and replace it with the alternate lens. (Note that when the new lens is properly installed, the grooves should be inside the bezel and the lens catalogue number on top.)
  - replace the bezel by lightly pressing it in place. Make sure that the lens is centered.
- After selecting the detector's location carefully remove the PCB E by loosening the PCB screw D (Figure 1). See Figure 2 to determine which holes to drill for the required mounting position. Run the wires through the two entry holes labeled C (Figure 2) and connect them according to the markings on the plastic back or as shown in Figure 1.

**Do not touch the sensor surface as this could result in a detector malfunction. If necessary, clean the sensor surface using a soft cloth with pure alcohol.**

## PCB Height Adjustment

The Pro+ is designed for optimal performance at a height of 2.1m (7ft), but can be installed lower or higher. After you have installed the detector, ensure that the adjustable height markings on the right side of the PCB matches the tab inside the back cover (see "D" in Figure 2).

For example, if the detector is installed at a height of 2.1m (7ft), the PCB should then be adjusted to 2.1m (7ft) (Figure 4). Align the desired marking (height) with the back cover's plastic tab.

If another installation height is called for, readjust the PCB accordingly. Any PCB adjustments should be followed by a walk-test of the protected area. Walk-testing verifies that the required coverage is in place.

## LED Setting (J1)

When movement is detected, the green LED will illuminate for 3 seconds.

**ON (default)** = This will enable the green LED  
**OFF** = This will disable the green LED



## Slow / Fast Mode (J2)

Jumper J2 is located inside the metal shield and is factory-set to the "ON" position (fast mode), which is recommended for the majority of installations. The use of slow mode (Jumper J2 "OFF") is suggested in areas where the incidence of false alarms may be greater. Use a small screwdriver to gently pry off the metal shield F (Figure 1) to access Jumper J2.

**ON (default)** = Fast Mode  
**OFF** = Slow Mode

## Powering The Paradox Pro+

Apply power by connecting the "AUX+" and "AUX-" of the control panel to the "+" and "-" terminals of the detector (Figure 1). Powering the detector initiates a self-testing program for the signal processor, memory and relay. The green LED will flash for a period of 35 seconds and the relay will follow the status of the LED.

## Walk-testing

In "test" mode (J2 = ON), at 20°C, you should not be able to cross more than one complete zone (consisting of two beams left and right sensor detecting elements) in the coverage area with any kind of movement; slow/fast walking or running. In slow mode (J2 = OFF), the amount of movement required to generate an alarm is doubled.

### TECHNICAL SPECIFICATIONS

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Sensor Type               | Dual rectangular element, low noise, high sensitivity |
| Coverage: 110° (standard) | 10.6m x 10.6m (35ft x 35ft)                           |
| Installation Height       | 2.1m to 2.7m (7 to 9ft)                               |
| Detection Speed           | 0.2m to 3.5m/s (0.6ft to 11.5ft/s)                    |
| Operating Temperature     | -20°C to +50°C (-4°F to +122°F)*                      |
| Voltage                   | Typically 11 to 16Vdc                                 |
| Current Consumption       | 31mA Maximum                                          |
| Lens                      | 2nd generation Fresnel lens, LODOFF® segments         |
| Alarm Output              | N.C., 28Vdc, 0.15A                                    |
| Anti-tamper switch        | N.C., 28Vdc, 0.15A Maximum                            |

\* UL ULC tested to 0°C to +49°C (-42°F to +120°F)

This device complies with Part 15 Subpart (B) of 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 undesired operation.

## Warranty

Paradox Security Systems Ltd. ("Seller") warrants its products to be free from defects in materials and workmanship under normal use for a period of one year. Except as specifically stated herein, all express or implied warranties whatsoever, statutory or otherwise, including without limitation, any implied warranty of merchantability and fitness for a particular purpose, are expressly excluded. Because Seller does not install or connect the products and because the products may be used in conjunction with products not manufactured by the Seller, Seller cannot guarantee the performance of the security system. Seller's obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller's option, any product not meeting the specifications. In no event shall the Seller be liable to the user for any consequential or incidental damages, including without limitation, any damages for lost profits, stolen goods, or claims by any other party, caused by defective goods or otherwise arising from the improper, incorrect or otherwise faulty installation or use of the merchandise sold.

Notwithstanding the preceding paragraph, the Seller's maximum liability will be strictly limited to the purchase price of the defective product. Your use of this product signifies your acceptance of this warranty.

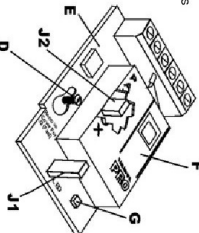
BEWARE! Dealers, installers and/or others selling the product are not authorized to modify this warranty or make additional warranties that are binding on the Seller.

The user is cautioned that any changes or modifications not expressly approved by Paradox Security Systems could void the user's authority to operate the equipment.

© 2002-2005 Paradox Security Systems Ltd. All rights reserved. Specifications may change without prior notice. One or more of the following US patents may apply: US05075103, US05271542, US05119069, and US05077549. Canadian and international patents may also apply. Patent #1-302-541 (CAN). ProPlus is a trademark or registered trademark of Paradox Security Systems, or its affiliates in Canada, the United States and/or other countries. LODOFF® is a registered trademark of Fresnel Technologies Inc. LODOFF® lens, patent #4,787,722 (U.S.). Auto Pulse Signal Processing (patented)

Figure/Figura 1

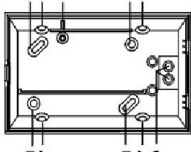
- alarm relay  
- relais d'alarme  
- rele de alarma
- power input (12Vdc)  
- alimentation (12Vdc)  
- alimentación (12Vdc)
- anti-tamper switch  
- interrupteur de sécurité  
- interruptor antisabotaje
- P.C.B. screw  
- vis de la carte de circuits imprimés  
- tornillo de PCI
- P.C.B.  
- carte de circuits imprimés  
- P.C.I.
- RF metal shield  
- blindage métallique RF  
- blindaje metálico RF
- detector/alarma LED (green)  
- DEL de detección/alarma (Verde)  
- LED de detección/alarma (Verde)



|                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>J1</b> LED Setting (Green)<br>Blindage (Relais Vert)<br>Configuración de luz LED (Verde)                                                                                                                                     |
| ON = enabled / activée / habilitado<br>OFF = disabled / désactivée / deshabilitado                                                                                                                                              |
| <b>J2</b> Slow/Fast mode (inside metal shield)<br>Mode lent/rapide (à l'intérieur du blindage métallique)<br>Modo lento / Rapido (al interior de blindaje metálico)<br>ON = Fast / Rapide / Rapido<br>OFF = Slow / Lent / Lento |

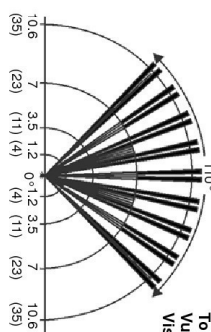
Figure/Figura 2

- corner mount  
- montage en coin  
- montaje en esquina
- flat surface mount  
- montage sur surface plane  
- montaje en superficie plana
- wire entry  
- entrée des fils  
- entrada de cableado
- align PCB height with tab  
- aligner hauteur de carte de circuits imprimés avec onglet  
- alinear la altura de la PCI con la lengüeta

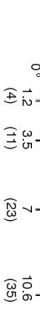


Figure/Figura 3

Top view  
Vue de dessus  
Vista aérea



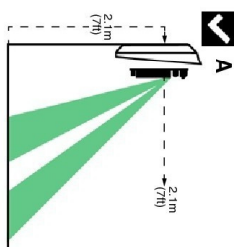
Side view  
Vue de côté  
Vista lateral



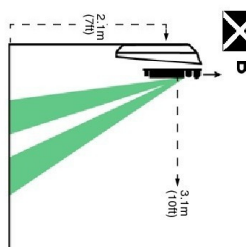
- all measurements shown in meters and (feet)
- toutes les mesures sont indiquées en mètres et en (pieds)
- todas las medidas están en metros y en (pies)

Figure/Figura 4

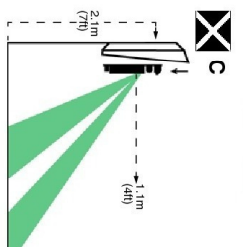
- optimum beam dispersion  
- dispersion optimale du faisceau  
- dispersión de haz óptima



- unit aims closer, the gap between beams is smaller. Pet immunity is compromised.



- l'unité capte plus près et l'espace entre les faisceaux est plus petit; l'insensibilité aux animaux est compromise.



- unit aims further, the gap between beams is wider. Pet immunity is compromised.
- l'unité capte plus loin et l'espace entre les faisceaux est plus grand; l'insensibilité aux animaux est compromise.
- el objetivo de la unidad está más lejos, la distancia entre haces es mayor. La inmunidad contra mascotas está comprometida.

