

# MAGELLAN™

## Digital Wireless Motion Detector with Pet Immunity (MG-PMD75) V2.0



Instructions  
Instrucciones

**P R D O X**  
SECURITY SYSTEMS  
paradox.com  
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### English

At the recommended height of 2.1m (7ft) ±10%, the MG-PMD75 motion detectors provide full coverage from 1.5m (5ft) to 11m (35ft). The installation height is measured from the center of the detector (Figure 1).

Avoid placing the detector within proximity of the following sources of interference: reflective surfaces, direct air flow from vents, fans, windows, sources of steam/oil vapor, infrared light sources and objects causing temperature changes such as heaters, refrigerators and ovens.

**⚠ Avoid bending, cutting or altering the antenna or mounting the detector near or on metal as this may affect signal transmission. 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 MG-PMD75 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 "H" in Figure 1). 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 1). 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 (J5)

This setting enables or disables the red LED (Table 1). The red LED will illuminate for a period of 4 seconds to indicate detected movement. The motion detector performs a battery test every 12 hours. If the battery voltage is too low, the red LED will flash at 5-second intervals and the motion detector will send a low battery signal to the receiver. A trouble will then be generated and transmitted to the central monitoring station. The red LED will flash rapidly when the motion detector transmits a signal to the receiver.

### Digital Shield™ Setting (J4)

In Normal Shield mode, the detector is set for normal environments. In High Shield mode, the detector is set for high-risk environments (potential interferences) and therefore provides greatly increased false alarm immunity. However, response time and detector speed may be slower. Refer to Table 1.

### Single or Dual Edge Processing (J3)

This setting determines the DSP (Digital Signal Processing) operational mode of the detector. Single Edge Processing mode should be used in normal environments with minimal sources of interference. Dual Edge Processing mode provides better false alarm rejection in the case where the detector is placed near sources of interference that can adversely affect the motion detector. Refer to Table 1.

### Operating Mode (J2)

This jumper determines what model of wireless receiver the motion detector will be communicating with, Omnia or Magellan. Refer to Table 1.

### Check-in Supervision Timer (J1)

Jumper J1 sets the time interval in which the detector communicates a check-in signal when used with Omnia or Spectra 1759EX (see Operating Mode). Refer to Table 1.

If the detector is used with Magellan (see Operating Mode), J1 is disabled and the detector will regularly transmit a check-in signal to Magellan. The check-in supervision time is set in the Magellan console.

**⚠ With an OMN-RCV3 V2.0 or higher, the receiver automatically detects the check-in time set in each of its assigned transmitters. As a result, the transmitters can have different check-in times. With a previous version of the OMN-RCV3, the transmitter check-in time needs to match the setting in the module.**

**⚠ With an OMN-RCV3 V2.0 or higher, if the check-in time setting is changed, power down and then power up the receiver in order for the change to be recognized.**

### Powering the Detector

1. Insert 3 "AAA" batteries into the battery holder while verifying polarity (Figure 4).
2. Insert the battery holder into the back cover and affix the battery connector to the PCB (see "A1" and "A2" in Figure 4).

**⚠ After connecting the battery connector, a power-up sequence will begin (lasting 10 to 30 seconds). During this time, the red LED will flash and the detector will not detect an open zone or tamper.**

### Replacing Batteries

1. Disconnect the battery connector from the PCB. Remove the battery holder and remove the old batteries.
2. Press and release the anti-tamper switch to ensure that the unit has powered down.
3. Follow the steps outlined in "Powering the Detector".

### Walk-testing

Open the cover in order to trigger the anti-tamper switch, then snap the cover back into position. This will activate the motion detector's walk-test mode for 3 minutes. At 20°C (68°F), in Normal Shield (J4 = ON) mode and Single Edge Processing mode (J3 = ON), you should not be able to cross more than one complete zone (consisting of 2 beams, left and right sensor detecting elements) in the coverage area with any kind of movement; slow/fast walking or running.

In High Shield mode, the amount of movement required to generate an alarm is doubled. The approximate width of a full beam at 11m (35ft) from the detector is 1.8m (6ft). When walk-testing, always move across the detection path and not toward the detector.

**🔑 Walk-test mode is also activated for 3 minutes once the motion detector is powered on.**

### Signal Strength Test

In order to verify the receiver's reception of the motion detector's signal, perform a signal strength test before finalizing the installation of the motion detector. Prior to performing the test, make sure the batteries have been inserted into the battery holder to power the detector. Also verify that the motion detector has been assigned to a zone. For more information on signal strength tests and zone programming, refer to the appropriate receiver's Reference and Installation Manual. If the transmission is weak, relocating the transmitter by a few inches can greatly improve the reception.

### Alive Software

If the motion detector transmits 2 alarm signals (LED on for 4 sec.) within a 5-minute period, the detector falls into Energy Save mode where it won't transmit any alarm signals for approximately 3 minutes. Due to the motion detector's Alive Software, the red LED continues to flash to indicate a detection even when in Energy Save mode. Once the 3-minute Energy Save mode ends, the motion detector returns to normal operation.

**🔑 If the detector's cover is removed and then replaced while in Energy Save mode, the first detection will trigger an alarm signal.**

Technical Specifications	
Sensor Type	Two dual opposed infrared sensors
Coverage - 90° (standard)	11m x 11m (35ft x 35ft)
Pet Immunity	Up to 40kg (90lbs)
Detector Speed	0.2m to 3.5m/sec. (0.6ft to 11.5ft/sec.)
Installation Height	2.1m to 2.7m (7ft to 9ft)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
RF Frequency	433* or 868MHz
Lens	2nd generation Fresnel lens, LODIFF®, segments
Power	3 X "AAA" alkaline batteries
Transmitter Range	35m (115ft) with MG-6130/MG-6160 70m (230ft) with MG5000 / MG5050 / MG-RTX3
Anti-Tamper Switch	yes
Battery Life†	Lowest check-in setting: 3 years Highest check-in setting: 1.5 years
Certifications (i.e. UL and CE)	For updated information on certifications, go to <a href="http://www.paradox.com">www.paradox.com</a>
Compatibility	MG-RTX3, MG5000, MG5050, MG-6130/MG-6160, MG-6030/MG-6060, 1759EX/1759MG, Omnia, MG-RCU3

\* FCC ID: KDYOMNPM75 Canada: 2438A-OMNPM75  
The MG-PMD75 complies with part 15 of the 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.

† Battery life expectancy will vary according to the check-in time interval and the amount of traffic (movement) the detector has processed. A higher check-in time interval and higher traffic will lower battery life.

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Warranty  
For complete warranty information on this product please refer to the Limited Warranty Statement found on the website [www.paradox.com/terms](http://www.paradox.com/terms). Your use of the Paradox product signifies your acceptance of all warranty terms and conditions.

Figure 1 / Figura 1

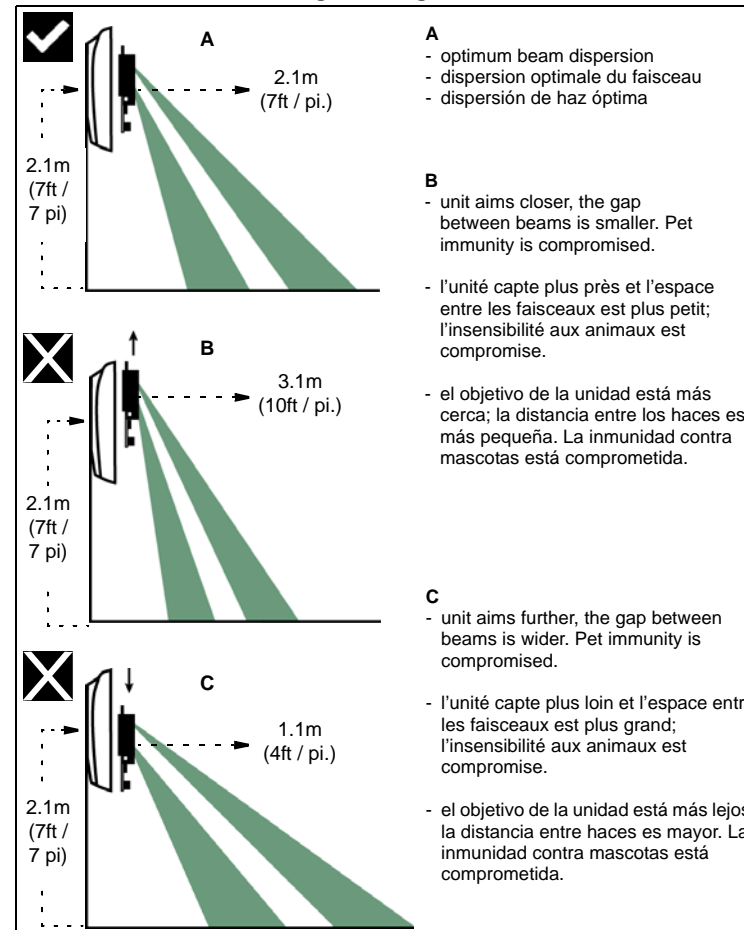


Figure 2 / Figura 2

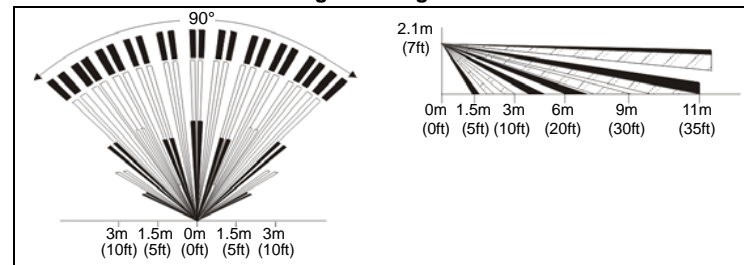


Figure 3 / Figura 3

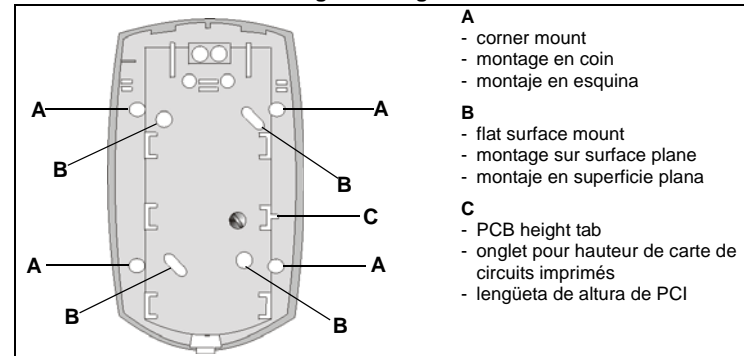
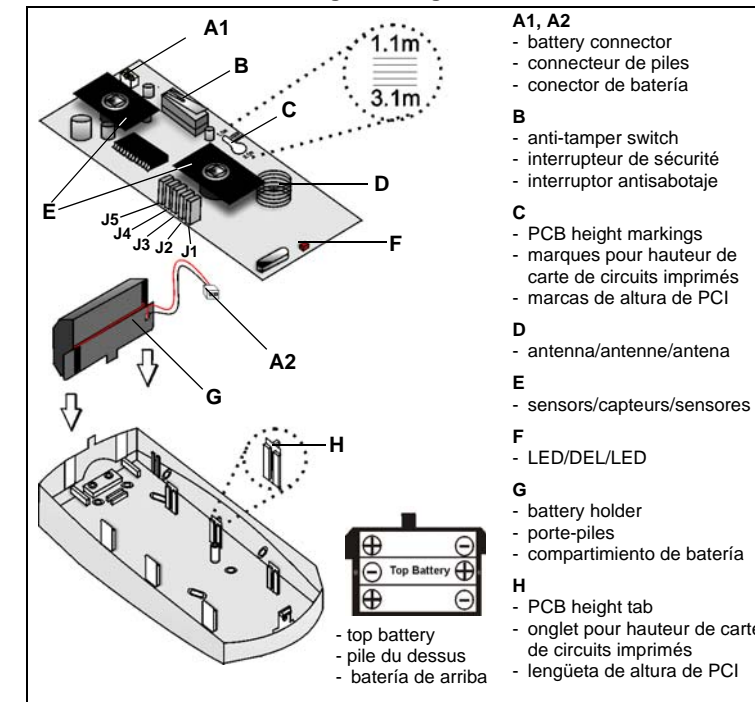


Figure 4 / Figura 4



Table/Tableau/Tabla 1

LED Indicator / Voyant DEL / Indicador LED	
J5	OFF = disabled/désactivé/deshabilitado ON = enabled/activé/habilitado Δ
Digital Shield (sensitivity) / Algorithme numérique Shield (sensibilité) / Digital Shield (sensibilidad)	
J4	OFF = High Shield (low sensitivity) / Protection élevée (faible sensibilité) Blindaje Superior (baja sensibilidad) ON = Normal Shield (high sensitivity) / Protection normale (forte sensibilité) Blindaje Normal (alta sensibilidad) Δ
Processing Type/Type de traitement/Tipo de Procesamiento	
J3	OFF = Dual edge / divisé / polaridad doble ON = Single edge / simple / polaridad simple Δ
Operating Mode / Mode de fonctionnement / Modo de Funcionamiento	
J2	OFF = Omnia / Spectra 1759EX ON = Magellan Δ
Check-in Supervision Timer / Délai de supervision de présence / Tiempo de Verificación de Presencia	
J1*	OFF = 12 minutes / minutos ON = 12 hours / heures / horas Δ

Δ = default/par défaut/de fábrica

\* = Omnia / Spectra 1759EX only

\* = Omnia / Spectra 1759EX seulement

\* = Sólo Omnia / Spectra 1759EX

After changing the jumper settings, snap on the cover to close the anti-tamper switch or press and release the anti-tamper switch in order to save the changes.

Après la modification des réglages des cavaliers, remettre le couvercle en place pour fermer l'interrupteur de sécurité ou enfoncer et relâcher ce dernier afin de sauvegarder.

Después de cambiar la configuración de los puentes, encaje la cubierta en su lugar para cerrar el interruptor antisabotaje o pulse y suelte el interruptor anti-sabotaje para guardar los cambios.

