

**Digital Dual-Optic
High-Performance PIR Module**

DMI70



Instructions / Instrucciones

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DMI70-T100
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Movement and Non-Movement Signal Indication

Section [001]: Options [3] and [4]

Movement Signal Indication: When option [3] in section [001] is enabled and the detector detects a signal that matches the characteristics of a movement signal, but does not reach the required energy levels for an alarm, the red LED will flash once indicating the signal was kept in memory.

Non-Movement Signal Indication: When option [4] in section [001] is enabled and the detector detects a non-movement signal, the green LED will flash once indicating the signal was rejected. Refer to Table 1 for more information.

Tamper Recognition

Section [001]: Option [5]

When option [5] in section [001] is enabled and the tamper switch is open (cover removed), the detector will send a tamper message to the control panel. Refer to Table 1 for more information.

Digital Shield Setting

Section [002]: Sensitivity

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 on page 1.

000 = Very Low Shield (Very High Sensitivity) default

001 = Low Shield (High Sensitivity)

002 = Normal Shield (Normal Sensitivity)

003 = High Shield (Low Sensitivity)

Utilities

Voltage Meter		Used for trouble-shooting, the voltage meter. Indicates the unit's input voltage.
	[900]	Displays [3-digit number] which represents input voltage x 10 e.g. [133] = 13.3V

Pet Immunity

The DMI70's two opposed dual element sensors combined with the proprietary Pet Friendly lens greatly decrease false alarms created by pets. In order to generate an alarm, an object must cross the beams created by both the lower and upper sensor (refer to Figure 3). Due to the small height and volume of pets, they will not generate the required signal value normally recognized as an alarm situation.

Walk-Testing

At 20°C (68°F) 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. When using higher level digital shield settings, the amount of movement required to generate an alarm is increased. 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, not toward the detector. The installer should test the detectors at least once per year.

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 Seller, Seller cannot guarantee the performance of the security system and shall not be responsible for circumstances resulting from the product's inability to operate. Seller obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller's option, any product not meeting the specifications. Returns must include proof of purchase and be within the warranty period. In no event shall the Seller be liable to the buyer or any other person for any loss or damages whether direct or indirect or consequential or incidental, 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.

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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.

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

Figure / Figura 1

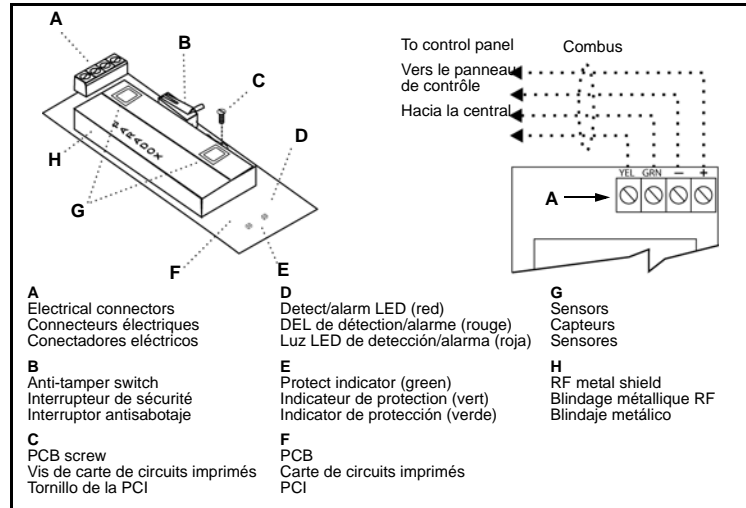


Figure / Figura 2

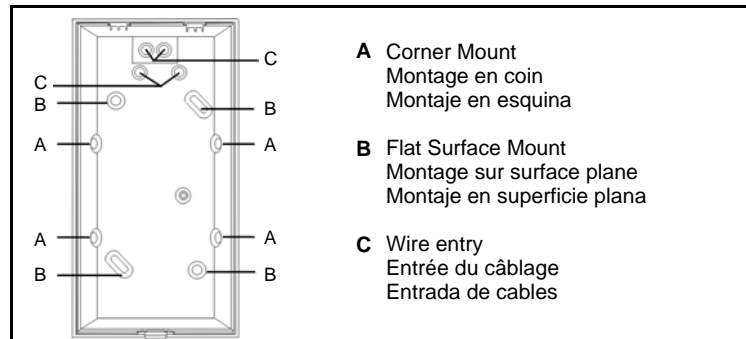
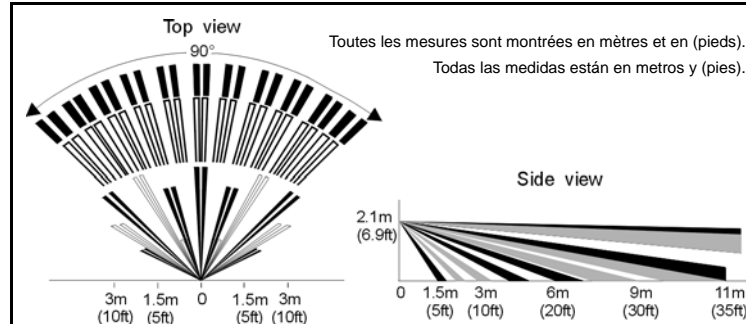


Figure / Figura 3



Technical Specifications	DMI70
Infrared sensor type	2 Dual elements
Sensor geometry	Rectangular
Detection speed	0.2m~3.5m/sec. (0.6ft to 11.5ft/sec.)
Operating temperature	-20°C to +50°C(-4°F to +122°F)
Voltage input	9-16 Vdc
Current Consumption	18mA (typical); 34mA (maximum)
RFI / EMI rejection	10 V/m
Lens	2nd Generation Fresnel lens
Coverage - 90° viewing angle	11m X 11m (35ft X 35ft)
Installation height	2m to 2.7m (7ft to 9ft)
Alarm Indicator	Red LED, constant light for 5 sec.
Detect Indicator	Red LED, 0.25 sec.
Protect indicator	Green LED, 0.25 sec. (lights when RFI/EMI rejected)
Alarm output / Tamper switch	Via Combus
Software	Winload and Babyware
Compatibility	Digiplex and Digiplex EVO series control panels, and Imperial V32 control panels
Pet Immunity	Up to 40 Kg (90 lb.)

Table/Tableau/Tabla 1

Section / Sección [001]			
Option/ Opción	English	Français	Español
[1]	Single/Dual Processing ON = Single edge Δ OFF = Dual edge	Traitement simple/divisé INSTALLÉ = Simple Δ NON INSTALLÉ = Divisé	Procesamiento Simple/Doble ON = Polaridad simple Δ OFF = Polaridad dual
[2]	Alarm Indication (red LED illuminates for 5 secs.) ON = Enabled Δ OFF = Disabled	Indication d'alarme (la DEL rouge s'allume pendant 5 secondes) INSTALLÉ = Activé Δ NON INSTALLÉ = Désactivé	Indicador de Alarma (La luz LED roja se ilumina por 5 segs.) ON = Habilitada Δ OFF = Deshabilitada
[3]	Movement Signal Indication (red LED will flash) ON = Enabled Δ OFF = Disabled	Indication de signal de mouvement (la DEL rouge clignote) INSTALLÉ = Activé Δ NON INSTALLÉ = Désactivé	Indicador de Señales de Movimiento (Luz LED roja parpadeará) ON = Habilitada Δ OFF = Deshabilitada
[4]	Non-movement Signal Indication (green LED will flash) ON = Enabled Δ OFF = Disabled	Indication de Signal de Non-Mouvement (la DEL verte clignote) INSTALLÉ = Activé Δ NON INSTALLÉ = Désactivé	Indicador de Señales de No-Movimiento (Luz LED verde parpadeará) ON = Habilitada Δ OFF = Deshabilitada
[5]	Tamper Recognition ON = Enabled OFF = Disabled Δ	Reconnaissance de sabotage INSTALLÉ = Activé NON INSTALLÉ = Désactivé Δ	Raconocimiento de Sabotaje ON = Habilitada OFF = Deshabilitada Δ
[6] - [8]	Future Use	Utilisation future	Uso Futuro

Δ = Default setting/Réglage par défaut/Valor de fábrica

English

Section [002]: Digital Shield Setting

___/___ (000 to 003 sensitivity; default: 000)

000 = Very Low Shield (very high sensitivity) Δ
001 = Low Shield (high sensitivity)
002 = Normal Shield (normal sensitivity)
003 = High Shield (low sensitivity)

Français

Section [002]: Réglage du blindage numérique

___/___ (000 à 003 sensibilité; par défaut: 000)

000 = protection très faible (sensibilité très élevée) Δ
001 = protection faible (sensibilité élevée)
002 = protection normale (sensibilité normale)
003 = protection élevée (sensibilité faible)

Español

Sección [002]: Configuración del blindaje

___/___ (000 a 003 sensibilidad; de fábrica: 000)

000 = Blindaje Muy Bajo (sensibilidad muy alta) Δ
001 = Blindaje Bajo (alta sensibilidad)
002 = Blindaje Normal
003 = Blindaje Superior (sensibilidad baja)

Français

Choisir le lieu d'installation du détecteur en fonction de la couverture requise et de la hauteur recommandée de 2,1 m (7 pi). Éviter l'installation à proximité de surfaces réfléchissantes, d'une circulation d'air provenant d'un système de ventilation, de ventilateurs et fenêtres, de sources de vapeur d'eau/huile, de sources de lumière à infrarouge et d'articles entraînant des variations de température tels que les dispositifs de chauffage, les réfrigérateurs et les fours.

Si une hauteur d'installation différente est requise, déplacer la carte de circuits imprimés à la hauteur d'installation appropriée indiquée sur son côté droit. Un petit ajustement peut être nécessaire selon la zone protégée. Tout ajustement de la carte de circuits imprimés devrait être suivi d'un essai de marche de la zone protégée. Un essai de marche vérifie que la couverture nécessaire est fonctionnelle, et ce, selon le gabarit de lentille utilisé.

! Ne pas toucher à la surface du capteur, car cela pourrait entraîner un mauvais fonctionnement du détecteur. Au besoin, nettoyer avec un linge doux et de l'alcool pur.

Une fois l'emplacement du détecteur choisi, percer des trous pour les vis ainsi que le montre la Figure 2.

Mise sous tension du détecteur

Raccorder les quatre bornes marquées RED (ROUGE), BLACK (NOIR), GREEN (VERT) et YELLOW (JAUNE) de chaque détecteur aux bornes correspondantes sur le panneau de contrôle tel qu'illustré à la Figure 1. La mise sous tension du détecteur lance un programme d'autotest pour la mémoire et le processeur de signaux. Les DEL rouge et verte clignotent pour indiquer que le système est

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 and ovens; and infrared light sources.

If another installation height is called for, move the PCB to the proper installation height indicated on the right side of the PCB. A small adjustment may be required, depending on the protected area. Any PCB adjustments should be followed by a walk-test of the protected area. Walk-testing verifies that the required coverage is in place, as per the lens pattern being used.

! Do not touch the sensor surface as this could result in a detector malfunction. Clean with a soft cloth and pure alcohol if necessary.

After selecting the detector's location, drill or punch out holes for the screws as described in Figure 2.

Powering the Motion Detector

Connect the four terminals labeled RED, BLACK, GREEN and YELLOW of each detector to the corresponding terminals on the control panel as shown in Figure 1. Powering the detector initiates a self-testing program for the signal processor and memory. The red and green LED will flash to indicate that the system is fully operational. When the LEDs are no longer flashing, the detector is ready.

Module Programming (except Imperial V32)

To enter the Module Programming Mode:

1. Press and hold the [0] key
2. Enter the [INSTALLER CODE]
3. Enter section [953] (DGP-848) / [4003] (Digiplex EVO)
4. Enter the detector's 8-digit [SERIAL NUMBER]
5. Enter the 3-digit [SECTION] you wish to program
6. Turn the desired option on/off or key in the required data

Please note that the serial number is located on the detector's metal shield (refer to Figure 1).

Single/Dual Edge Processing

Section [001]: Option [1]

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 on page 1.

ON = Single Edge (default)

OFF = Dual Edge

Alarm Indication

Section [001]: Option [2]

When option [2] in section [001] is enabled and the detector detects a signal that matches the characteristics of a movement signal and reaches the required accumulated energy level for an alarm, the red LED will turn on for 5 seconds. Refer to Table 1 for more information.

