Wireless 2-Way Outdoor DT Detector

Installation Instructions

Model: DPD743 / DPD786

Description

The DPD743/786 is a battery powered wireless DT detector that has been designed to provide enhanced 24-hour outdoor protection, with Active IR Anti-mask capabilities. Integrated Dual Technology (DT) combines two K-band microwave channels with two PIR sensors for better catch performance and pet immunity, minimizing false alarm.

Features include

- PIR coverage: 12m, 90°
- Two channel K band - MW detection **(Sway Recognition)**
- Pet immunity
- Two correlated PIR Sensors
- Light sensor for reducing false alarms due to sunlight
- Active IR Anti mask
- Various mounting heights with optional swivel bracket
- Designed for outdoor installation, UV resistant, IP 65
- Cover and wall tampers
- 3-axis-accelerometer for protection against vandalism

Installation

Step 1: Preliminary Considerations

Select the mounting location for best coverage of the area that is to be protected (see Step 2: Coverage Patterns). Pay attention to the following:

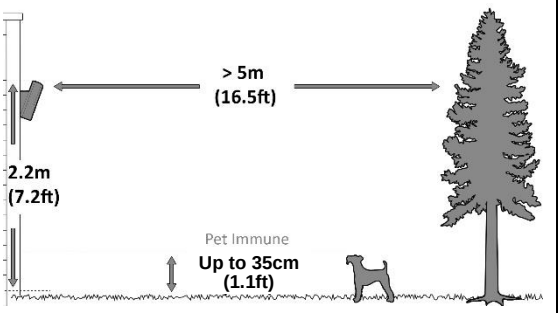


Figure 1

Install the device in a location where the detector's field of view is clear of any static obstacle

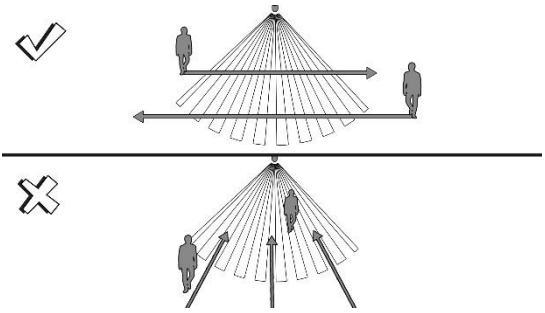


Figure 2

Walking direction must cut across the beam pattern

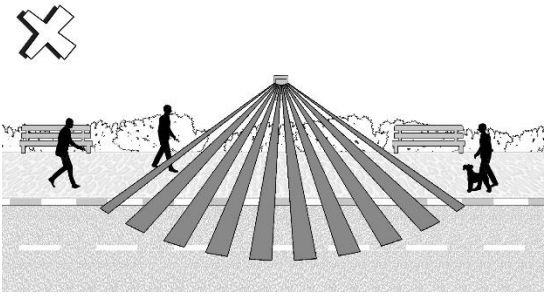


Figure 3

Do not install the device close to any moving objects

Step 2: Coverage

PIR Coverage

Mounting height [m]	Distance [m]
1.8	10
2.2 (optimal)	12

Note For pet immunity, install the detector at the optimal height of 2.2 meters.

PIR Coverage - Using Swivel Bracket

Note The table below is relevant when using the Swivel Bracket (Model: BRS180).

Mounting height [m]	Swivel Angle [°]	Distance [m]
1.8	0	10
	5	7
	10	5
2.2 (optimal)	0	12
	5	8
	10	6
2.5 – 2.7	0	N/A
	5	10
	10	7

NA = Avoid such installation

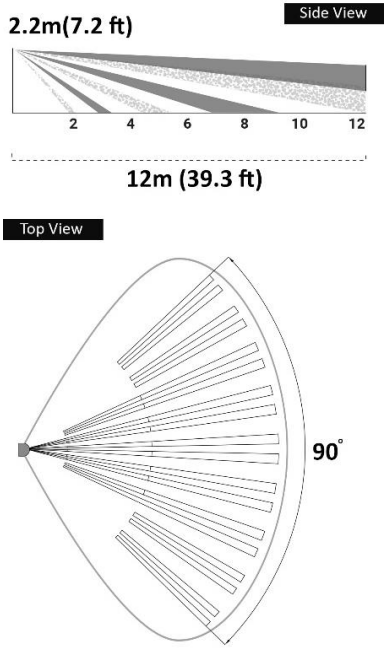


Figure 4 Coverage Pattern

NA = Avoid such installation

Step 3: Enrolling the Detector in the System

For complete description of the wireless configuration and device enrollments, refer to Programming Guide for the FORCE and VISION Alarm Systems

Enrollment of the DPD detector in the system can be performed manually or automatically via the keypad.

Auto Enrolling (using RF Communication):

1. Enter Installer menu, and select:
   System Configuration > Peripherals > Wireless Peripherals > Enroll and delete > Detectors >Enroll >Auto Enrollment
2. Insert the batteries (see step 5) and connect the detector to the mounting bracket. In 3 seconds the detector will send an Enrollment message. The serial number should appear on the keypad.
3. Select Enroll and press ⏎.

Manual Enrolling:

1. Enter Installer menu, and select:
   System Configuration > Peripherals > Wireless Peripherals > Enroll and delete > Detectors >Enroll >Manual Enrollment

2. Enter the serial number and press ⏎.

3. Select Enroll and press ⏎.

Enrolling through the Force Manager Software:
You can enroll the detector using Force Manager software; For information refer to the Force Manager Manual.

Step 4: Mount the Detector on the Wall Bracket

1

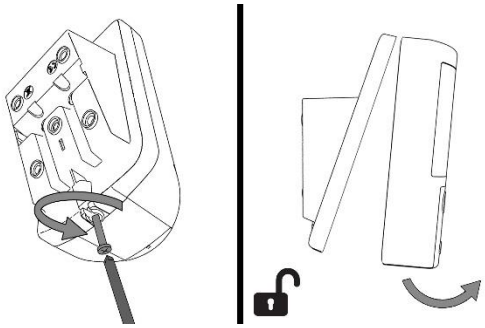


Figure 5

Unscrew and separate detector from mounting bracket.

2

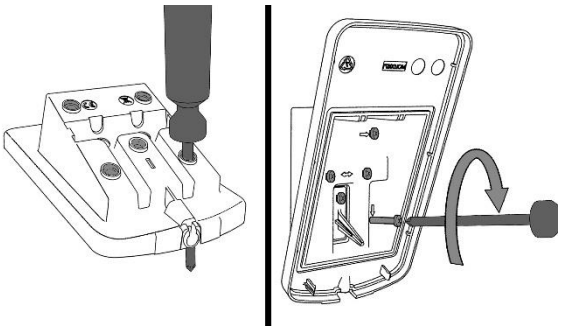


Figure 6

Open the 5 knockout holes of the wall bracket and use as a template for mounting.

3

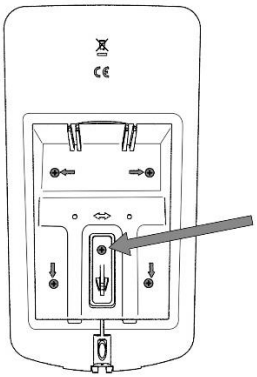


Figure 7

Secure the wall bracket to the wall using the 5 screws.

4

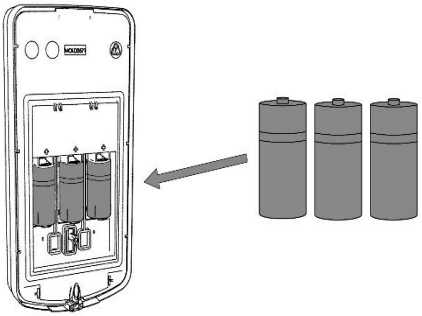


Figure 8

CAUTION! The detector batteries are supplied inside of the unit, which are covered with plastic wrapping. Remove the plastic wrapping from the batteries before installation.

Observing battery polarity, insert 3 CR123 3V Lithium batteries (supplied) into the batteries compartment.

5

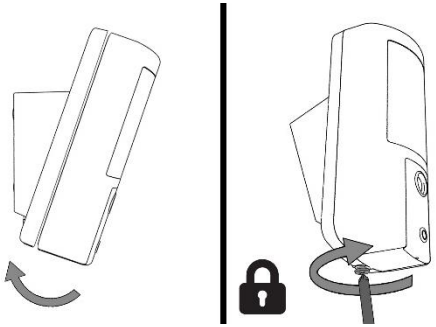


Figure 9

Insert and fasten the screw to lock the detector.

Step 6: Performing a Walk Test

1

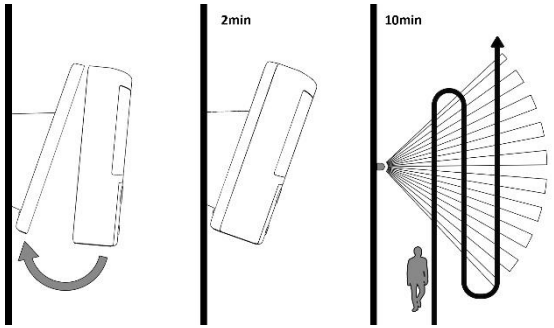


Figure 10

The detector automatically enters walk test mode for 10 minutes following tamper closure. Walk through the entire protected area and observe the LEDs to confirm full coverage (*see LED Status*).

2

Manually initiate a walk test:

Select Installer Menu: Diagnostics > Zones Test > Select Single zone or All Zones.

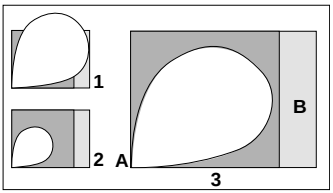
The detector remains in walk test mode until any key on the panel is pressed.

Note: *The LEDs switch off after Walk Test to avoid a situation of mapping the detection zone and to extend battery life.*

Step 7: MW Range Adjustment

1 Over power
2 Under power
3 Correct adjustment

A Detector
B Corridor



Anti-Mask Calibration

Following tamper closure, the anti-mask calibration procedure begins (up to 2 minutes). For successful calibration, make sure that there are no objects near the detector for the duration of the procedure.

Detector Configuration

Being bi-directional, the detectors parameters can be modified from the keypad or from the system configuration software according to your needs.

PIR Sensitivity:	High/Low*
MW Sensititvity:	Min. 25%, 50%, 65%*, 85%, max. **
Anti-Mask:	Yes/No*
LED:	On*/Off
Operation Mode:	Immediate: The detector transmits after each detection
	Normal – every 2.5 minutes*
Disposition Sensor:	Enable/Disable*
* Default ** In maximum sensitivity sway recognition is disabled to achieve optimum sensitivity	

NOTE: The Disposition Sensor sends an alarm following change in the position of the detector.

LED Status

LED	State	Description
Yellow	ON	PIR detection
	Flashing	Anti-Mask detection
Red	ON	Alarm, Tamper Close/Open
	Flashing (4 times)	Low battery indication
Green	ON	MW detection
	Flashing (4 times)	Successful registration

Specifications

Electrical	
Battery Type :	3 x CR 123, 3V Lithium Battery
Battery Life:	3 batteries – 3 year typical lifetime
Current consumption:	48 µA
Supervision Transmission:	15 minutes
RF transmitting frequencies:	433.92 MHz, 24.05GHz; 868.65 MHz, 24.05 GHz
Optical	
Filtering:	White Light Protection
Pet Immunity:	Up to 45Kg (99lb) animal
Physical	
Size (LxWxD):	176 x 89 x 107 mm (7 x 3.5 x 4.2 in)
Weight:	410 grams (14.5 oz.)
Environmental	
RF Immunity:	According to EN50130-4
Operating Temperature:	-30°C to 60°C (-22°F to 140°F)
Storage Temperature:	-20°C to 60°C (-4°F to 140°F)
Relative Humidity	90% max
Power Output	868.65 & 433.92Mhz: 10mW Max. MW 24.05 GHz: 39.8mW Max.

Ordering Information

Model	Frequency	P/N
DPD743	433MHz	8841242
DPD786	868MHz	8841243
BRS180	-	5000020

UKCA and CE RED Compliance Statement

Hereby, PIMA declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. For the CE Declaration of Conformity please refer to our website: www.pima-alarms.com

Limited Warranty

PIMA Electronic Systems Ltd. does not represent that its product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily 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 User understands that a properly installed and maintained equipment may only reduce the risk of events such as burglary, robbery, and fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no death, personal damage and/or damage to property as a result.

Read this guide in its entirety before attempting to program or operate your system. Should you misunderstand any part of this guide, please contact the supplier or installer of this system.

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