



SIM-PI

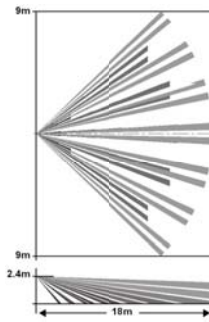
DIGITAL QUAD PIR DETECTOR
WITH PET IMMUNITY



Pet Immunity Up To 25 kg

INSTALLATION MANUAL
P/N 7106272 Rev A

Wide Angle Lens



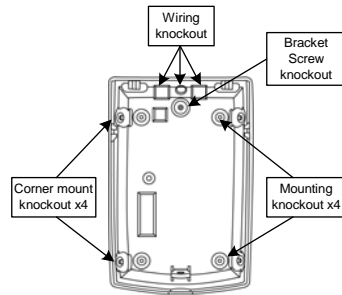
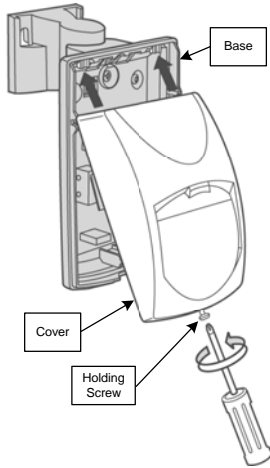
AVOID THE FOLLOWING LOCATIONS:

- Facing direct sunlight.
- Facing areas that may change temperature rapidly.
- Areas where there are air ducts or substantial airflows.
- Avoid screen, curtain that may block detection area.
- Do not install outdoors.

SPECIFICATION:

Detection	PIR
Power Input	8.2 - 16 Vdc
Current Consumption	Standby: 8mA (± 5%) Active with LED: 10mA (± 5%) Active w/o LED: 6mA (± 5%)
Detection Range	Up to 18m
Mounting	Ceiling, Corner or Wall with optional mounting bracket set
Pulse Width	Adjustable
Alarm Period	2 sec.
Alarm Output Relay	N.C 28Vdc 0.1A with 10 Ohm in line resistor
Tamper Switch	N.C 28Vdc 0.1A with 10 Ohm in line resistor
Warm Up Period	60sec (± 5sec)
Operating Temperature	-20°C to 50°C
Operating Humidity	95% max relative humidity non condensing
Storage Temperature	-30°C to 70°C
RFI Protection	30V/m 10 -1000MHz
EMI Protection	50,000V electrical Interference from lightning
Dimensions	90.5mm x 61mm x 37.5mm

INSTALLING THE DETECTOR

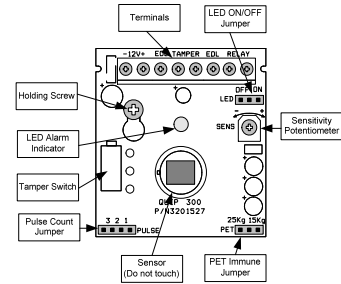


WIRE REQUIREMENTS

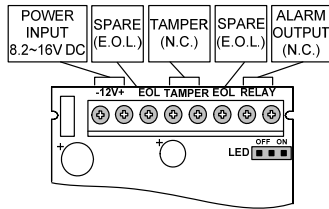
Use #22 AWG (0.5mm) or wires with a larger diameter. Use the following table to determine required wire gauge (diameter) and length of wire between the detector and the control panel.

Wire Length	m	200	300	400	800
Wire Diameter	mm	.5	.75	1.0	1.5
Wire Length	ft	800	1200	2000	3400
Wire Gauge	#	22	20	18	16

PCB LAYOUT



WIRE CONNECTIONS



Terminal 1 - Marked - (GND)
Connect to ground of the control panel.

Terminal 2 - Marked + (+12V)
Connect to the positive Voltage output of 8.2 ~ 16Vdc source (usually from the alarm control unit).

Terminals 3&6 - Marked EOL
End of line options.

Terminals 4 & 5 - Marked TAMPER

Connect these terminals to a 24hour normally closed protective zone in the control unit. Once the front cover of the detector is opened, an immediate alarm signal will be sent to the control unit.

Terminals 7 & 8 - Marked RELAY
These are the output relay contacts of the detector. Connect to the control at zone input.

DETECTOR SETTINGS

PET IMMUNITY JUMPER

PET Immunity to an animal up to **15 kg**

PET Immunity to an animal up to **25 kg**

PULSE COUNT JUMPER

PULSE Installation for normal Stable environment with wide-angle lens – set to **1 PULSE**

PULSE When operating in harsh environment use **2 or 3** pulse count selection.

PULSE For harsh environment.

Note: For Long Range Lens set pulse count to 2.

LED ENABLE / DISABLE JUMPER

LED Set jumper to **ON** position to enable LED.

LED Set jumper to **OFF** position to disable LED.

ADJUSTING SENSITIVITY

The sensitivity potentiometer should be adjusted according to the security risk level at the installation site.

For high-risk environment adjust sensitivity close to **MIN** (15%). In low risk situations, adjust sensitivity closer to **MAX** (100%), factory set to 57%.

TESTING THE DETECTOR

Apply 12 Vdc power to the detector, wait 2 minutes to finish the detector warm up time. Conduct testing with the protected area cleared of all people.

Walk test

1. Remove front cover.
2. Make sure that **PULSE** switch is in position **1**.
3. Make sure that **LED** switch is **ON**.
4. Replace the front cover.
5. Start walking slowly across the detection zone.
6. Observe that the detector's LED lights whenever motion is detected.
7. Allow 5 sec. between each test.
8. After the walk test is completed, the **LED** and **PULSE** jumpers may be changed.

NOTE: Walk tests should be conducted, at least once a year, to confirm proper operation and coverage of the detector.



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