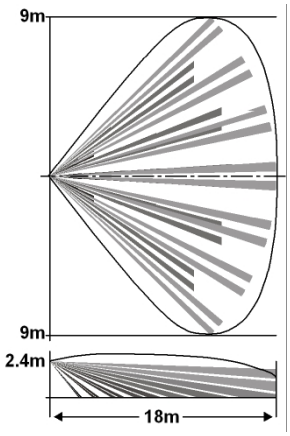
SIM-04

DIGITAL DUAL DETECTOR
PIR AND MICROWAVE

INSTALLATION INSTRUCTIONS
P/N 7106762 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 Method	PIR element & microwave pulse Doppler
Power Input	8.2 to 16 Vdc
Current Draw	Active : 25.5 mA Standby: 16.5 mA
Temperature Compensation	YES
Alarm Period	2 +/- 1 sec
Alarm Output with protection	N.C 28Vdc 0.1 A 10 Ohm series resistors
Tamper Switch with10 Ohm resistor - open removed	N.C 28Vdc 0.1A series protection when cover is
Warm Up Period	1 min

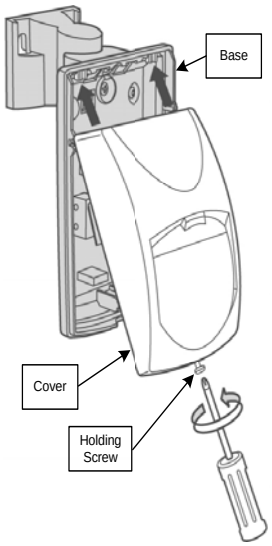
LED Indications

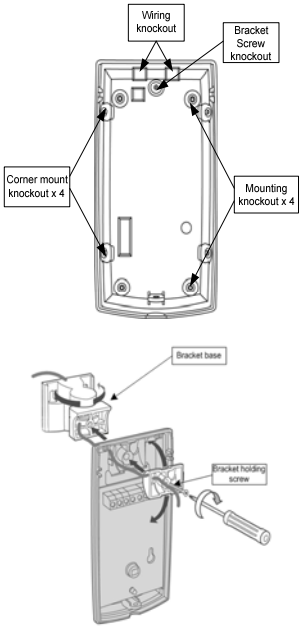
Yellow blinking during warm up period and self testing

Red LED: ON during alarm
Green LED: PIR CHANNEL
Yellow LED: MW CHANNEL

Dimensions	115mm x 61mm x 37.5mm
Weight	120g

INSTALLING THE DETECTOR



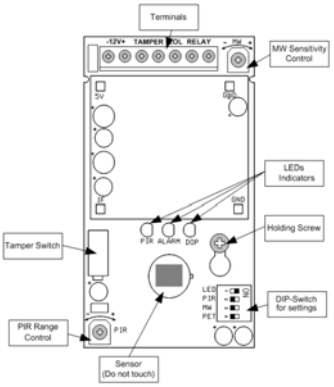


WIRE REQUIREMENTS

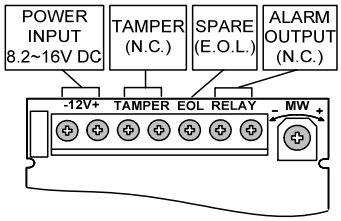
Use #22 AWG (0.5mm) or wires with a larger diameter. Use the following table to determine required wire gauge (diameter) and length of wire between the detector and the control panel.

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.

Terminals 3 & 4 - Marked TAMPER
Connect these terminals to a 24hour normally closed protective zone in the panel.

Terminal 5 - Marked EOL
End of line option.

Terminals 6 & 7 - Marked RELAY
These are the output relay contacts of the detector.
Connect to the control at zone input.

DETECTOR SETTINGS

Switch 1: LED Control
Position Right – ON - LEDs ENABLE
The RED LED will activate when the detector is in alarm condition.
Position Left – OFF - LEDs DISABLE

Note: the state of the switch "LED" does not affect the operation of the relay.

Switch 2: PULSE count for PIR.
Position Left – OFF. High sensitivity
2 PULSES - for normal stable environment.

Position Right – ON. Low sensitivity
3 PULSES - for harsh environments.

Switch 3: MW range control according to the room size.
Position Left – OFF – Long
For room size 10m – 18m.
Position Right – ON – Short
For room size 5m – 9m.

Switch 4: the PET Immune function
Position Right - ON - Immunity up to 15 kg
Position Left - OFF - Immunity up to 25 kg

RANGE ADJUSTMENT

PIR SENSITIVITY

Use the Potentiometer marked "PIR" to adjust the detection sensitivity between 15% and 100%, according to walk test in the protected area.

Factory setting is 57%.

MW SENSITIVITY

The "MW" potentiometer adjusts the detection sensitivity of Doppler between 40% and 100% (factory set to 65%).

Rotate the potentiometer clockwise to increase sensitivity.

Rotate the potentiometer counter- clockwise to decrease sensitivity.

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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