

Dual Technology Passive Infrared/Microwave Detector - 1 or 2 Pulse Count, RFI/EMI Immunity, Microprocessor Based, Back Radiation Prevention, Temperature Compensation, Look Down Zone, Microphone Option • Détecteur double technologie IRP et hyperfréquences - Comptage Impulsions 1 ou 2 - Immunité aux interférences radioélectriques et électromagnétiques - Gestion par microprocesseur - Protection contre le champ arrière parasite - Compensation de température - Détection zone basse - Option microphone • Detector de Doble Tecnología - Infrarrojo Pasivo/Microondas - Conteo de 1 ó 2 Pulsos, Inmunidad a Interferencias de RFI/EM, Basado en Microprocesador de Señales, Prevención de Retro-Radiación, Con Compensación de Temperatura, Detección de Angulo Cero, Micrófono Opcional.

English

Location of Detector

Consider the following before mounting the detector:

- Select a location from which the pattern of the detector is most likely to be crossed by a burglar, should there be a break in.
- Do not place bulky objects in front of the detector.
- Avoid a location that comes in direct contact with radiators, heating/cooling ducts or air conditioners.
- Do not place the detector in front of windows subject to direct sunlight or drafts.
- For maximum coverage, select an appropriate height and vertical angle from the following table:

ATLAS	Lens Type	Installation Height	Vertical Scale
1650	Stand.	7.2ft/2.2m	+2
1240	Stand.	7.2ft/2.2m	0
620	Stand.	7.2ft/2.2m	-4
1650	Pet	4ft/1.2m	0
1240	Pet	4ft/1.2m	0
620	Pet	4ft/1.2m	0

Table 1

- Atlas Microphone Units: Do not place objects near the microphone opening, as this will obstruct the unit's listen in capabilities.

Installation Instructions

- Open the housing by removing the front cover. To do so, press the tab located on the bottom of the detector.
- Remove the PCB by unscrewing the board from the rear of the protective plastic casing. Note: Do not touch the face of the PYRO sensor.
- Knock out the mounting and wiring holes.
- Thread wires through the wiring holes (from the outside of the unit) using the appropriate wiring hole knockouts.
- Choose an appropriate mounting height from table 1 and attach the base to the wall.
- Connect the wires to the terminal block located on the right side of the PCB as shown in Figure 1.

Note: This equipment should be installed in accordance with the NFPA 70 standard.

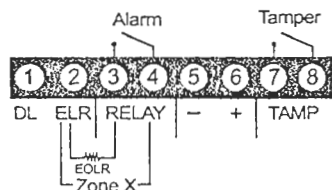


Figure 1: Terminal Block

1=disable LED; 2=ELR (optional End Of Line Resistor); 3=relay; 4=relay; 5=GND; 6+=Vin; 7=tamper; 8=tamper.
Note: Electronics Line recommends using 20 - 22 AWG connection cable.

- Mount the PCB at the required vertical adjustment and replace the PCB screw.
- Adjust the microwave amplifier gain by turning the trimmer (located below the microwave antenna) clockwise to increase sensitivity or counterclockwise to decrease sensitivity.
- Set the DIP switches according to the following:

Switch	↓ OFF	↑ ON
1	LED indicator OFF (disabled)	LED indicator ON (enabled)
2	2 Pulse (2P)	1 Pulse (1P)
3	50Hz Filter	60Hz Filter

Table 2

- Atlas Microphone Units: connect the wires to the microphone's terminal block located on the lower left portion of the PCB according to the following terminals (left to right): 1 = Microphone Gnd, 2 = Microphone Output. Adjust the microphone trimmer by turning the trimmer clockwise to increase sensitivity or counterclockwise to decrease sensitivity. Note: The microphone feature is not suitable for UL installation.

- Attach the front cover, making sure to click the plastic housing closed.

Operation and Adjustment

- Apply 9 - 16Vdc and allow the detector to stabilize for 90 seconds.
- Make sure that the pulse counter and LED indication have been set.
- Conduct a walk test by walking across the area protected by the detector. Confirm that the three LEDs activate and deactivate accordingly. LED indication of microwave detection will only occur after PIR detection. The LED indicators are as follows:

LED	Indication
Red	Alarm detection
Yellow	Microwave detection
Green	PIR detection

Table 3

- To remote enable the LEDs, provide 0V from the control panel to the DL pin in the terminal block. To remote disable the LEDs provide 12V.
- Changing Lenses: To change a lens, release the lens frame using a small screwdriver and fix the new lens into place with the smooth side facing outwards. Verify that the word TOP is located at the top of the lens (alternatively a notch may appear on the bottom edge of the lens) before snapping the lens frame back into place.

Please note the following:

LED indication of a walk test is dependent on the LED indicator DIP switch selection and the usage of the LED remote enable/disable option. It is recommended to enable LED indication, set the detector to 1P for the walk test and to have the microwave trimmer set to maximum. The detector should be walk tested weekly. The unit is to be connected to a UL Listed power supply or control unit capable of providing a minimum of 4 hours of standby power.

The detector is supplied with the microwave trimmer set for maximum sensitivity.

Units using a pet lens should have their look-down zones blocked to reduce the probability of a false alarm.

Technical Specifications

Input Voltage: 9 - 16Vdc.

Current Consumption: Standby 20mA @12V.

Max. (Alarm) 34mA @16V.

Max. (Alarm) with Microphone 37mA @16V.

Coverage: ATLAS 620 - 6m/20ft.

ATLAS 1240 - 12m/40ft.

ATLAS 1650 - 16m/50ft.

Alarm Duration: 1 second minimum.

PIR Pulse Count: 1 or 2 DIP switch selectable.

PIR Sensor: Dual pyroelectric element.

Microwave Antenna:

Built-in with back radiation shield.

Microwave Frequency:

10.525GHz, 9.9GHz, 10.687GHz.

RFI Immunity:

30 Volts/meter between 25MHz to 1GHz.

Alarm Relay Output: N.C., Dry Contacts.

Switching 30Vdc, 0.3A max not to exceed 10W.

Tamper Switch: N.C., Contact Rating 30Vdc, 50mA max.

Optional Rear Tamper Switch: 12Vdc, 50mA max.

Operating Temperature: -7° to 55°C.

Optional Microphone:

Sensitivity: -64±3dB.

Frequency Response: 20-16,000Hz.

S/N Ratio: 40dB.

Current Consumption: 0.6mA max.

Maximum Humidity: Up to 95%.

Temperature Compensation: Thermistor.

Reverse Polarity Protection: Diode.

Fire Protection: ABS.

LED Indication: DIP switch selectable.

Warm-up Period: 90 seconds.

Dimensions: 4.4 x 2.8 x 2.2"/113 x 70 x 55mm.

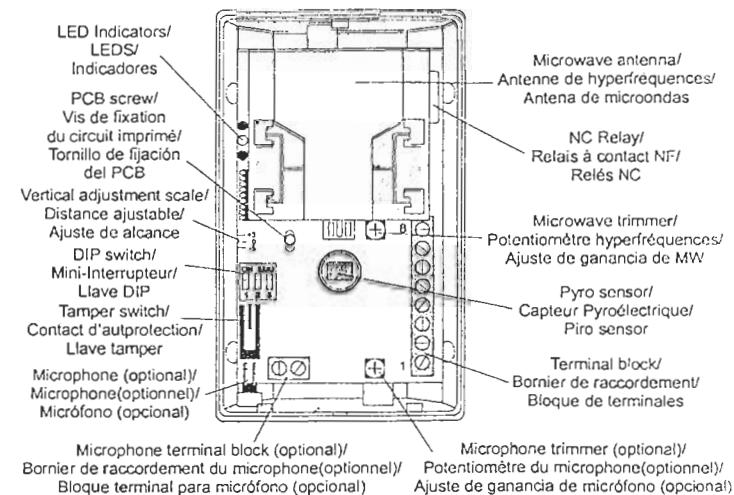
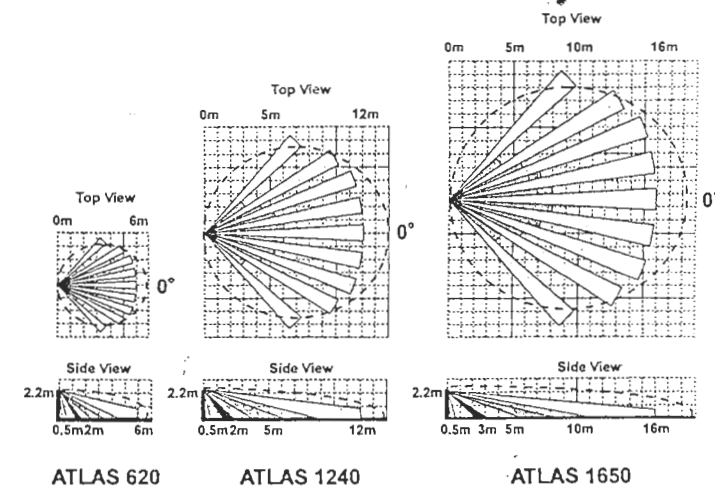


Figure 2: PCB / Figure 2: Circuit Imprimé / Figura 2: PCB

Standard Lens Patterns / Zones de Couverture / Diagramas de Detección



ATLAS 620

ATLAS 1240

ATLAS 1650



Hereby, Electronics Line declares that this detector is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.