Location of the 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.
- 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.
- Do not place bulky objects in front of the detector.
- Microwave energy will pass through glass and most construction walls, point the unit away from outside traffic and rotating machinery.

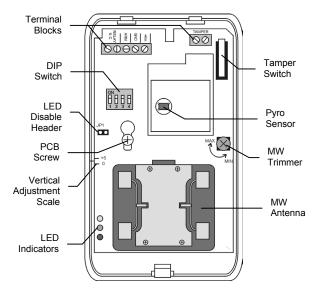


Figure 1: Dual EL-1486 (cover off)

Installation Instructions

- Open the housing by removing the front cover. To do so, press the tab located on the bottom of the detector.
- Loosen the PCB screw, slide the PCB downwards and lift to remove. Note: Do not touch the face of the PYRO sensor or MW antenna.
- 3. Knock out the required mounting and wiring holes.
- 4. Thread the cable through the wiring holes (from the outside of the unit) using the appropriate wiring knockouts.
- 5. Seal the wiring hole with the foam plug provided.
- 6. Choose an appropriate mounting height (recommended 2.2m) and attach the base to the wall.
- 7. Connect the wires to the terminal block (as shown in figure 2).

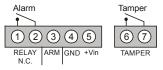


Figure 2: Terminal Blocks

- Terminals 1 & 2: Alarm Relay Contacts
- **Terminal 3:** Alarm Memory Control (0V = Disarmed, 12V = Armed)

Terminals 4 (-) & 5 (+): Voltage Input
Terminal 6 & 7: Tamper Contacts

- Replace the PCB and tighten the PCB screw.
- 9. Attach the front cover making sure to click the plastic housing shut.

Operation and Adjustment

Warm-up time: The detector will need to warm up for the first 90 seconds after applying 9 - 16Vdc.

Note: The unit is to be connected to a UL listed power supply or control unit capable of providing a minimum of four hours standby power.

Setting the pulse counter: The pulse counter determines the number of beams that need to be crossed before an alarm is generated. To set the pulse counter, refer to Table 2 for the appropriate dip-switch setting. Walk testing the detector: A walk test determines the coverage pattern of the detector. To perform this test, walk across the scope of the detector according to the detection pattern selected. Confirm that the LEDs

activate and deactivate as described in Table 1. Note that microwave detection is indicated only after a successful PIR detection. Wait 3-5 seconds between walk tests. Adjust microwave sensitivity by turning the MW trimmer clockwise to increase sensitivity or counter-clockwise to decrease sensitivity. Do not set microwave sensitivity higher than required. This test should be performed weekly.

Setting the LED indicators: To enable/disable the LED indicators refer to Table 2 for the appropriate DIP-switch setting. If the LEDs are disabled, the memory function is not affected and the red LED still flashes after an alarm.

Remote LED disable: Using header JP1, it is possible to remotely disable and enable the LED indicators using an external switch. To do so, set Switch 4 to OFF, open JP1 to disable the LEDs and short JP1 to enable the LEDs.

LED	Indication
Yellow	Microwave detection
Green	PIR detection
Red	Alarm detection
Flashing	Microwave Supervision
Green/Yellow	Failure (replace unit)

Table 1: LED indication

Memory function: The Memory function indicates that an alarm occurred while the system was armed. When using this feature, connect switched 12V to terminal 3 (0V = System Disarmed, 12V = System Armed).

To indicate an alarm, the red LED flashes after disarming the system. To reset the memory function, briefly arm and then disarm the system. In Memory mode, the LEDs are always disabled while the system is armed.

Note: If terminal 3 (ARM) is not connected, set switch 3 to ON.

Switch	ON	OFF
1	60Hz Flourescent Light Noise Filter	50Hz Flourescent Light Noise Filter
2	1 Pulse	2 Pulse
3	Memory Disabled	Memory Enabled
4	LEDs Enabled	LEDs Disabled

Table 2: DIP-Switch Configuration

Technical Specifications

Operating Voltage: 9 - 16VDC

Current Consumption: Standby 26mA@12V

Max. (Alarm) 43mA@16V

Coverage: 18m x 18m

Pulse Count: 1 or 2 Selectable
Pyroelectric Sensor: Dual Element
Microwave Antenna: Planar Patch

Microwave Frequency: 10.525, 10.687 or 10.590GHz

Alarm Output: N.C.

Switching Voltage: 30VDC not to exceed 10W Switching Current: 0.3A not to exceed 10W

Alarm Duration: 2 seconds Tamper Switch: N.C.

Contact Rating 30VDC, 50mA max.

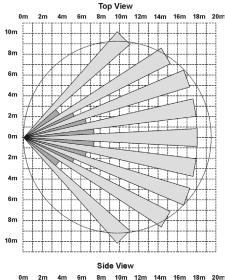
Operating Temperature: -10° to 60°C

Temperature Compensation: Thermistor

Reverse Polarity Protection: Diode

Fire Protection: ABS Plastic Housing

LED Indicators: Selectable
Dimensions: 127 x 71 x 56mm



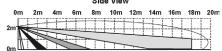


Figure 3: Lens Pattern

Note: The diagram shows the maximum coverage pattern for the detector set at a vertical adjustment of 0°.



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