

# EL-2650C

The EL-2650C is a wireless curtain PIR sensor designed for protecting windows, doors, wide entrances and corridors. The detector provides up to 9m curtain coverage and can be wall or ceiling mounted. The sensor implements a feature to combat the problem of multiple transmissions, which drastically reduce the life of the batteries. After a transmission is made, the EL-2650C initiates a delay of approximately four minutes during which transmissions will not be sent.

## Location of Detector

Consider the following before mounting the sensor:

- Select a location from which the pattern of the sensor 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 bulky objects in front of the sensor.

## Installation Instructions

1. To open the housing, remove the cover screw and, using a flathead screwdriver, press the locking tab at the side of the unit.
2. Remove the printed circuit board (PCB) by unscrewing the PCB screw. **Note: Do not touch the face of the PYRO sensor.**
3. Apply battery power by removing the isolator that separates the battery from the contacts on the battery holder.
4. Place the Mode jumper over pins 1 & 2 (Radio mode); the LED flashes. **Note: Install the Mode jumper only after applying battery power.**
5. Set the receiver to Registration mode and wait for the receiver to indicate that the transmitter has been registered successfully. Alternatively, the EL-2650C can be registered to the receiver by manually entering the transmitter's serial number.

**Note: The receiver allocates a transmitter number to each registered unit. Write this number and the number of the zone on the sticker provided. Affix the sticker inside the front cover for future reference.**

6. Remove the jumper and place it over one pin for storage - see *Mode Jumper Safeguard*.
7. Knock out the mounting holes and test the transmitter from the exact mounting position before permanently mounting the unit.
8. Attach the base to the wall at the recommended height of 2.2-2.6m. The EL-2650C can be wall or ceiling mounted.
9. Mount the PCB at the required setting and tighten the PCB screw – see *Operation and Adjustment, PCB Adjustment*.
10. Attach the front cover and replace the cover screw.

## Operation and Adjustment

**Warm-up Time:** After applying power, allow the sensor to warm up for 110 seconds. **Note: Avoid moving in front of the detector during the Warm-up period.**

**PCB Adjustment:** PCB adjustment enables you to angle the infrared beams by changing the position of the pyro element in relation to the lens. To adjust the PCB, loosen the PCB screw and slide the PCB to the required position.

Slide the board towards the protected wall to position the beams further away from the wall as shown in Figure 2. This is recommended when the EL-2650C is installed less than 25cm from the wall.

Slide the board away from the protected wall to position the beams closer to the wall. After adjusting the board, tighten the PCB screw.

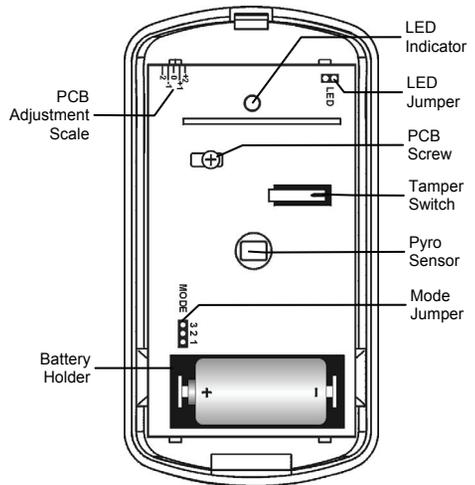


Figure 1: EL-2650C (cover off)

Slide the PCB towards the protected wall

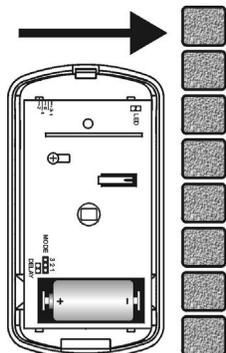


Figure 2: PCB adjustment for installations less than 25cm from the protected wall

**Incorrect installation:** The detector is mounted less than 25cm from the protected wall and the PCB is incorrectly positioned away from the wall causing the beams to run into the wall.



**Correct installation:** The detector is mounted less than 25cm from the protected wall and the PCB is positioned close to the wall causing the detector's beams to run alongside the wall.

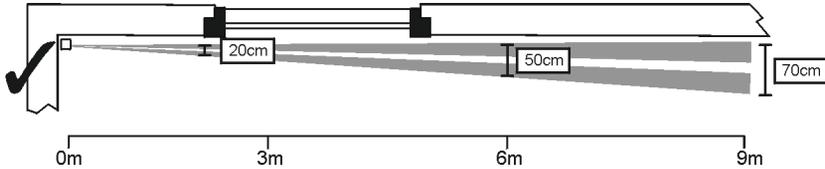


Figure 3: Positioning the beams in relationship to the wall.

**Walk Test:** A Walk Test enables you to determine the effectiveness of the installation. Before you perform a Walk Test, place the Mode jumper over pins 2 & 3 (Walk Test mode) to cancel the four-minute delay time between detections. To perform a Walk Test, leave the protected area and enter the room; the red LED blinks twice to indicate motion. Allow ten seconds between walk tests. After testing the detector, remove the Mode jumper and place it over one pin for storage – see *Mode Jumper Safeguard*.

**LED Disable:** To disable the LED, remove the LED jumper located next to the LED indicator.

**Note:** The LED should only be disabled after successfully walk testing the sensor.

**Mode Jumper Safeguard:** During normal operation, the Mode jumper should be placed over one pin for storage. When the Mode jumper is placed over two pins, the sensor is either in Radio or Walk Test Mode. As a precaution, these modes are limited to approximately four minutes. After the four minutes have expired, the sensor switches back to normal operation. If this happens, you can reset a mode by removing and replacing the Mode jumper.

## Technical Specifications

Antenna: Built-in Internal Whip

Frequency: 433.92MHz, 418MHz or 868.35MHz FM

Power: 3.6V ½ AA Lithium Battery

**Caution: Fire, explosion and severe burn hazard!**

**Do not recharge, disassemble or heat above 100°C.**

Current Consumption: 30mA (transmission), 6µA (standby)

Pyroelectric Sensor: Dual Element

Maximum Range: 9m

Operating Temperature: -10° to 60°C

LED indicator: Jumper Selectable

RFI Immunity: 30V/m

Adaptive Temperature Compensation

Fire Protection: ABS Plastic Housing

Dimensions: 90 x 50 x 40mm

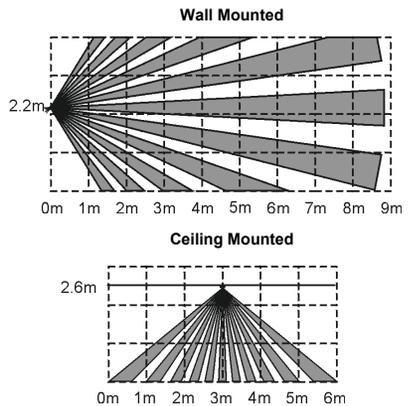


Figure 4: Lens diagrams (side view)



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