

## English

The EL-2745 is a wireless PIR sensor designed for use with Electronics Line 3000's supervised wireless range of receivers. The EL-2745 implements a feature to combat the problem of multiple transmissions that drastically reduce the life of the batteries. After each detection, the sensor initiates a three-minute delay during which transmissions will not be sent.

### 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.

### Installation Instructions

1. Open the housing. To do so, slide the detector up while gently pressing it and detach it from the mounting bracket (see Figure 2). Insert a screwdriver in the release slot (see Figure 2, position 1), turn the screwdriver 90° to release the cover.

**Note: Do not touch the face of the PYRO sensor.**

2. Apply battery power. To do so, open the battery compartment door on the back cover (see Figure 2, position 2), then remove the isolator that separates the battery from the contacts on the battery holder. Close the battery compartment door.

3. Place the Mode jumper over pins 2 & 3 (Radio Mode); the LED flashes.

**Note: Install the Mode jumper only after applying battery power.**

4. Set the receiver to Registration mode and wait for the receiver to indicate that the transmitter has been registered successfully. Write the number of the zone and the transmitter number (if applicable) on the sticker provided. Affix the sticker inside the front cover for future reference.

**Note: Alternatively, the EL-2745 can be registered to the receiver by manually entering the transmitter's serial number.**

5. Place the detector at the recommended height of 2.2 m (6.6 ft) and test the transmitter from the exact mounting position before permanently mounting the unit.

**Note: If you choose mounting height other than recommended (which is not advised), please perform a walk test to check the lens coverage. The recommended mounting height is the best in terms of detection area.**

6. Knock out the mounting holes and attach the mounting bracket to the wall.

If using the rear tamper switch, insert a screw into the rear tamper mounting hole located in the center of the bracket (See Figure 2, position 3). When the bracket is removed from the wall, the screw causes the tamper release to break away from the bracket and the rear tamper switch is released.

7. Replace the front cover. Align the pins on the mounting bracket with the slots on the detector's base (See Figure 2, position 4 & 5), attach the EL-2745 to the bracket and slide it down while gently pressing it to fit to its place, then attach the screw provided in the detector kit to the bottom of the mounting bracket (See Figure 2, position 6).

### Operation and Adjustment

**Warm-up Time:** The detector will need to warm up for the first 90 seconds after applying power.

**Pulse Counter:** The pulse counter determines the amount of beams that need to be crossed before the sensor will produce an alarm. The available options are 1, 2, 3 or Adaptive pulse count. Using the Adaptive pulse count feature, the detector chooses between 1 or 2 pulses based on its analysis of the received signal. To set the pulse counter, refer to Table 1 for the appropriate DIP-switch setting (the default setting is shaded).

Switch 2	Switch 3	Pulse Count
OFF	OFF	1
ON	OFF	2
ON	ON	3
OFF	ON	Adaptive

Table 1

**Walk Test Mode:** A walk test is performed in order to determine the lens coverage pattern of the detector (See Figure 3). Walk Test mode cancels the delay time between detections, enabling you to perform an efficient walk test.

To walk test the detector:

1. Place the Mode jumper over pins 1 & 2.
2. Walk across the scope of the detector according to the detection pattern selected.

Confirm that the LED activates and deactivates accordingly. Wait for ten seconds after each detection before continuing the test.

3. After completing the walk test, remove the jumper and place it over one pin for storage - see Mode Jumper Safeguard.

**LED Indication:** The LED indicator is lit every time a transmission is made. To enable/disable LED indication, refer to Table 2 for the appropriate DIP-switch setting (the default setting is shaded).

Switch 1	LED Indicator
OFF	Disabled
ON	Enabled

Table 2

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

**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 detector is either in Radio or Walk Test Mode. As a precaution, these modes are limited to four minutes. After the four minutes have expired, the detector switches back to normal operation. If this happens, you can reset a mode by removing and replacing the mode jumper.

**Battery Replacement:** Open the battery compartment door on the back cover (see Figure 2, position 2), replace the battery, attach the EL-2745 to the bracket and slide it down while gently pressing it to fit to its place.

**Note: Attach the EL-2745 to the bracket immediately after each battery replacement.**

### Signals and Messages:

In case of a low battery (2.5 V and below), the sensor low battery condition is reported to the Control System and low battery message is displayed.

When the rear tamper switch is released, the sensor sends a tamper condition to the Control System that generates tamper alarm.

### Technical Specifications

Antenna: Built-in Internal Whip

Frequency: 868.35MHz\*, 433.92MHz, or 418 MHz

Power: 3.6V ½ AA Lithium Battery

**Caution: Fire, explosion and severe burn hazard! Do not recharge, disassemble or heat above 100°C (212F).**

Current Consumption: 30mA (transmission)

12µA (standby)

Pyroelectric Sensor: Dual Element

Maximum Coverage: 14 x 14m

Pulse Count: 1, 2, 3 or Adaptive (selectable)

LED Indicator: Selectable

Digital Adaptive Temperature Compensation

RFI Immunity: 30V/m

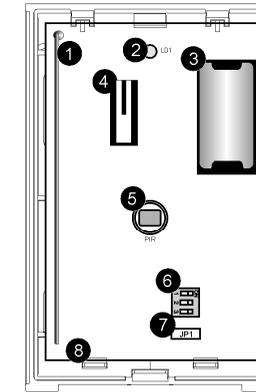
Operating Temperature: -10 to 60°C

Fire Protection: ABS Plastic Housing

Dimensions: 110 x 62 x 50mm

Screw recommended: ST 2.9x22 DIN 7981 (ISO 7049)

\* Complies with EN-50131 2-2 Grade 2 Class II, Power Supply Type C



1. Antenna
2. LED Indicator
3. Battery Compartment
4. Front Tamper
5. Pyro Sensor
6. Dip-switch
7. Mode Jumper
8. PCB Release Tab

Figure 1: EL-2745 (Cover off)

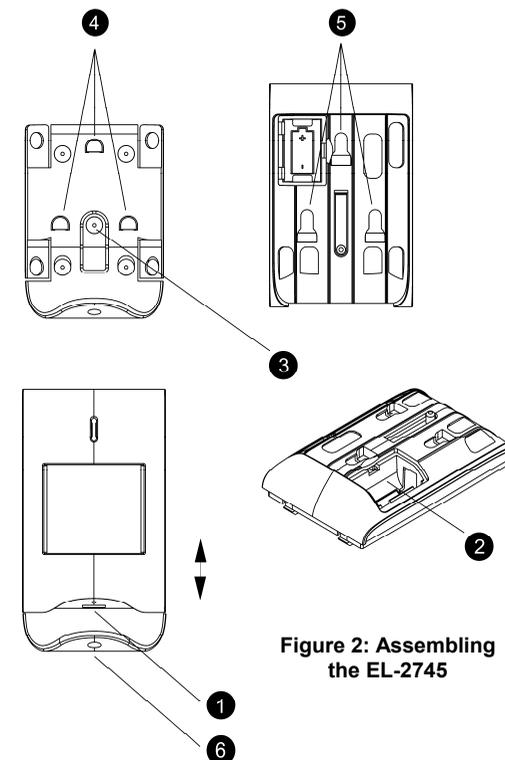


Figure 2: Assembling the EL-2745

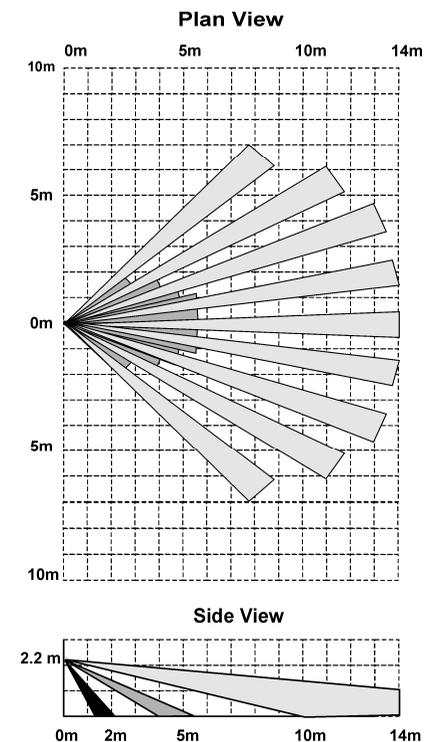


Figure 3: Standard Lens Coverage Pattern