



NEELSON
I N D U S T R I E S

MPES760

Oyster Style DIY Security Light
Max 60watt BC Frosted GLS
Approx Range 6mts 100 degrees
Time setting approx 120 secs
Passive Infra Red Sensor

ES760 - Oyster Style DIY Security Light

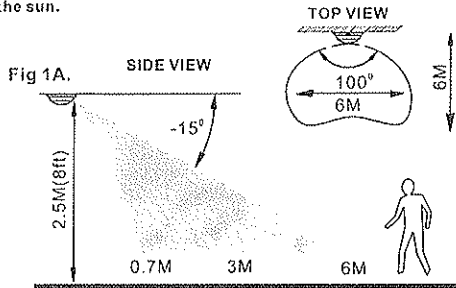
Introduction

The Nelson ES760 Sensor Light incorporates a PIR (Passive Infra Red) sensing device which continuously scans a preset operating zone and immediately switches the light on when it detects movement in that area. This means that whenever movement is detected within the range of the sensor the light will switch on automatically to illuminate pathways, steps, patios, porches, or whatever area you have selected to light for reasons of safety, convenience or security. While there is movement within range of the unit the light will remain on.

Where to fit your Sensor Light (Nelson ES760)

To achieve best results for outside or inside use the Nelson ES760 Movement Activated Sensor Light should be mounted on a wall, ceiling or under eaves, often replacing an existing light fitting as the Sensor Light can be mounted directly onto an existing light globe socket (batten holder). Ideally the Movement Activated Sensor Light should be mounted 1.8 to 2.5 metres (6 to 8ft) above the area to be scanned (refer Fig. 1A).

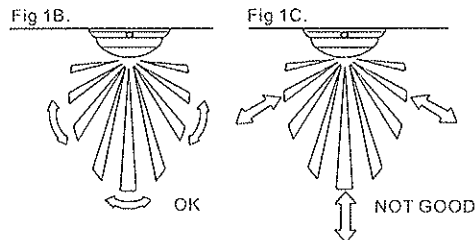
NOTE: To avoid damage to unit do not aim the sensor towards the sun.



NOTE: To avoid nuisance triggering, the sensor should be directed away from heat sources such as barbecues, air conditioners, other outside lighting, moving cars and flue vents.

Do not aim towards reflective surfaces such as smooth white walls, swimming pools, etc. The Nelson ES760 Movement Activated Sensor Light scanning specifications (approximately 6 metres at 100°) may vary slightly depending on mounting height and location. The detection range of the unit may also alter with temperature change. Before selecting a place to install your Sensor Light you should note that movement across the scan area is more effective than movement directly toward or away from the sensor. (Refer Fig. 1B) If movement is made walking directly towards or away from the sensor and not across, the apparent detection range will be substantially reduced. (Refer Fig. 1C)

WARNING: The ES760 Sensor Light is not waterproof and must be installed in a sheltered position.



INSTALLATION

The light can be installed by using either of the following methods.

- Do it yourself. Fitted directly to an existing light globe socket. First check if your existing light fitting and globe is mounted directly onto a light globe socket.
- Installation by a licensed electrician. Where no existing light globe socket exists, installation must be carried out

A. DIY INSTALLATION

Fitting the Sensor Light to an existing light globe socket

- Switch power OFF at the meter box and ensure that there is no power to the light globe socket. Simply isolating the electrical supply at the wall switch is not sufficient isolation to prevent an electrical shock.
- Remove your existing light fitting to expose the light globe and globe socket (batten holder). Check that the light globe socket is attached to a rigid support which cannot move or vibrate. Fix if necessary.
- Remove the light globe from the light globe socket then unscrew and remove the skirt ring. (Fig. 2) Fig 2. Light Globe Socket (Batten Holder)
- Using a wide blade screwdriver remove the approach diffuser by twisting the screwdriver blade in diffuser slots. (Fig. 3)
- Locate the threaded part of the light globe socket through the hole in the base of the Sensor Light. (Fig. 4)
- Replace the skirt ring (Fig. 4), turn the sensor to face across the direction of approach (Fig. 5), then tighten the skirt ring.

- Insert the bayonet plug into your existing light globe socket. For good light diffusion fit a pearl light globe (max. 60 Watt) into the Sensor Light lamp holder. (Fig. 6)

- Refer to Automatic Operation, "Daylight Testing"

Fig 2. Light Globe Socket (Batten Holder)

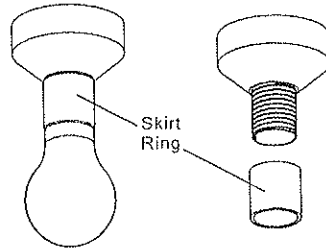


Fig 3.

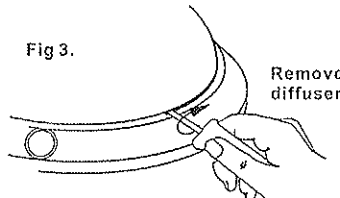


Fig 4. Fit over light globe socket

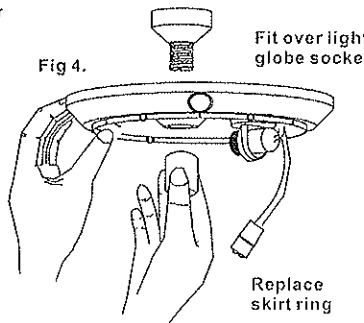


Fig 5.

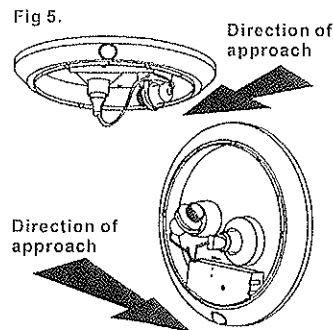
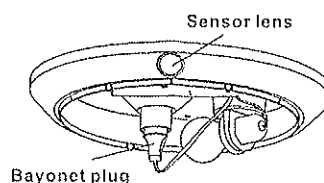


Fig 6. Insert bayonet plug and fit light globe



B. INSTALLATION by a LICENCED ELECTRICIAN

When replacing an existing hard wired light fitting or in new installations where no lighting point exists, the Sensor Light may be screwed to the wall or ceiling at the chosen location. Your electrician could install a new light globe socket which would then allow you to follow steps 1 to 8 in Section A.

CAUTION: Where no existing light globe socket (batten holder) exists, installation must be carried out by a licensed electrician.

Notes for Electrician

The Sensor Light should be wired to its own light switch. Do not interconnect with other lights on the same switch. To hard wire the Sensor Light, cut cable and remove the bayonet plug. Then, using a terminal block or cable connector, join house wiring to the Sensor Light. Ensure that the connector and wiring is not in close proximity to the globe. No earth connection is required.

Automatic Operation

The Sensor Light should always remain in automatic mode whether inside or out as it incorporates a daylight sensor which prevents the light switching on during daylight hours. At dusk or whenever the daylight falls below a certain level the Sensor Light will switch on when movement is detected within its detection area.

Daylight Testing

After installation the Sensor Light should be tested to ensure that good sensitivity is achieved and the sensor is positioned correctly to detect movement from the required area.

- With the diffuser removed cover the small hole with 25mm (1") of black PVC tape (see Fig. 7) or a small piece of BLU-TACK (i.e. Any suitable opaque material to fully cover small hole.)
- Switch light switch on. The light will stay 'ON' for approximately 2 minutes, then the light will switch 'OFF' provided that there is no movement in the detection area.
- Starting from a point more than six metres from Sensor Light, walk into the detection area (Refer Fig. 1A, 1B, 1C). As you move into the detection area the light will automatically switch 'NO' if the detection distance is satisfactory, no adjustment is necessary and black PVC tape or similar should be removed and diffuser fitted.

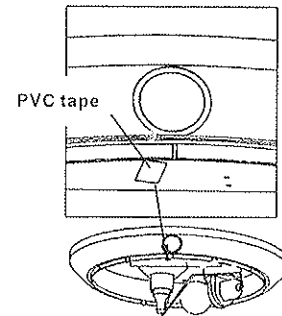
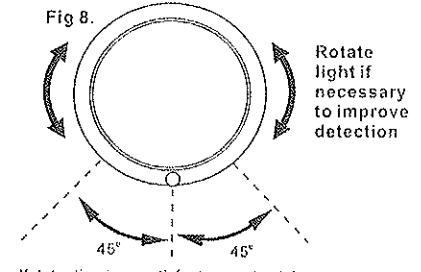


Fig 7.

Fig 8.



- If detection is unsatisfactory and not detecting in the required area, adjustment can be made by rotating the entire light fitting up to 45° in either direction (See Fig. 8)
- Repeat walk test as previously described and adjust again if detection is not satisfactory.
- If necessary, to secure the Sensor Light in its correct position, drive one of the screws provided through one of the holes in its base and into the wall or ceiling behind. The screw should not be overtightened. Care should be taken to avoid drilling or screwing into concealed electrical wiring
- Remove black PVC tape covering small hole and fit diffuser.

NOTE: The Sensor Light is designed to operate at night time when it is dark, but may also operate during daytime under low light conditions.

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Manual Operation(Automatic Override)

To override the automatic mode, the light must be switched ON in the "automatic" mode. Now switch your wall switch OFF and back ON within two seconds. Your Sensor Light will now stay on continuously, just like a normal light. This override function can be selected during daytime or nighttime. To return your Sensor Light to the "automatic" mode, switch your wall switch OFF for at least five seconds, then switch it ON again. To switch your Sensor Light off completely, switch your wall switch OFF.

Maintenance

To avoid dust build-up and ensure proper functioning of your Sensor Light, wipe the sensor lens lightly with a damp cloth every three months. Periodically remove light diffuser and clean inside and out with warm soapy water.

Specifications

Input Voltage	230/240V 50Hz
Power Consumption	75 Watts activated 4 Watts Standby
Globe size	60 Watts BC(Pearl/Frost Recommended)
Detection System	Passive Infra Red(PIR)
Approx. Range	6 metres at 100Degree Scan
Time on Setting	120 seconds approximately

Trouble Shooting Guide

Trouble		Suggested Remedy
Light does not switch ON when there is movement in the detection area	1. No mains power	Check all connections, and fuse and switch.
	2. Globe faulty or missing	Check. Replace.
	3. Nearby lighting is too bright	Relocate sensor Light.
	4. Sensor positioned in wrong direction	Rotate the entire light fitting to aim sensor to a better position. (see Daylight Testing section)
Light switches ON for no apparent reason	1. Heat sources such as aircon, Vents, heater flues or very cold objects are near sensor	Rotate the entire light fitting to aim sensor to a better position (see Daylight Testing section)
	2. Animals/birds e.g. possums.	Probably unavoidable.
	3. interference from on/off switching of electric fans or lights on the same circuit as your Sensor Light. (This problem does not always occur but a faulty switch or noisy fluorescent light may cause the Sensor Light to switch on.)	Should the false triggering become troublesome, consider: A. Replacing a faulty switch. B. Replacing noisy fluorescent tubes and/or starters. C. Connecting the Sensor light to a separate circuit. (in most cases where one or more of the above suggestions have been carried out, false triggering has been reduced.)
	4. Interference from power surges, mobile Phones, CB's, Taxis, etc.	Nil
	5. Heat source, BBO etc.	Rotate the entire light fitting to aim sensor to a better position. (see Daylight Testing section)
	6. Reflection from swimming pool or reflective surface	Rotate the entire light fitting to aim sensor to a better position. (see Daylight Testing section)
Light switches on during daytime	1. Piece of black PVC tape covering daylight sensor	Remove PVC tape
	2. Overcast day or low ambient light conditions.	Nil.
Poor sensitivity and range	1. Movement directly to or away from sensor.	Rotate the entire light fitting to aim sensor to a better position. (see Daylight Testing section)
	2. Higher ambient temperature.	Nil Note: All passive infra red detectors are more sensitive in cold weather than warm weather
Light remains on	1. Light is in manual operation continuous 'on' mode (automatic override).	Switch light off for five seconds, then return to 'on' position.