

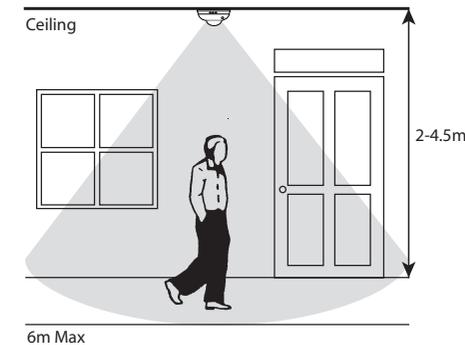
## INSTALLATION INSTRUCTIONS

MAL547

**ARLEC****MOVEMENT ACTIVATED  
SURFACE MOUNT CEILING SENSOR****HARDWIRE** INSTALL BY QUALIFIED ELECTRICIAN**IMPORTANT! PLEASE READ THESE INSTRUCTIONS CAREFULLY.****WHERE TO FIT YOUR  
SECURITY SENSOR**

To achieve best results the Arlec Security Sensor should be mounted on a ceiling, or under eaves of a building, generally used to control an existing light fitting. The Security Sensor should be mounted 2 - 4.5 metres above the area to be scanned (Refer Figure.1).

Figure 1.Side View



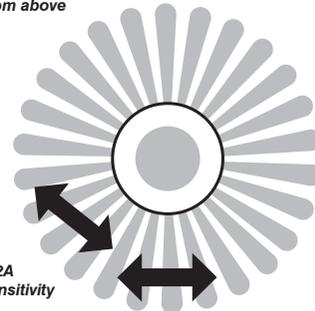
To avoid nuisance triggering, the sensor should not be installed near heat sources such as barbecues, air conditioners, other outside lighting, moving cars and flue vents.

Do not install near reflective surfaces such as smooth white walls, swimming pools, etc.

The Arlec Security Sensor scanning specifications (approximately 6 metres at 360°) may vary slightly depending on the mounting height and location.

The detection range of the unit may also alter with temperature change. Before selecting a place to install the Arlec Security Sensor, you should note that movement across the scan area is more effective than movement.

View from above

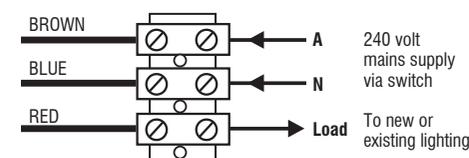
Figure 2A  
Best sensitivity

directly toward or away from the sensor (Refer Figure.2A). If movement is made walking directly toward or away from the sensor and not across it, the apparent detection range will be substantially reduced (Refer Figure.2B).

**INSTALLING YOUR  
SECURITY SENSOR**

**WARNING:** Must be installed by a licenced electrician or other person authorised by legislation to work on fixed wiring of an electrical installation.

Figure 3.

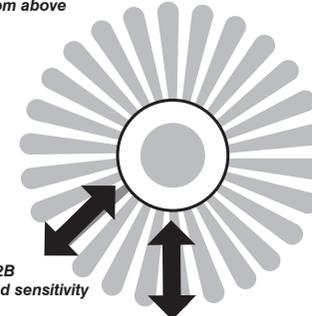
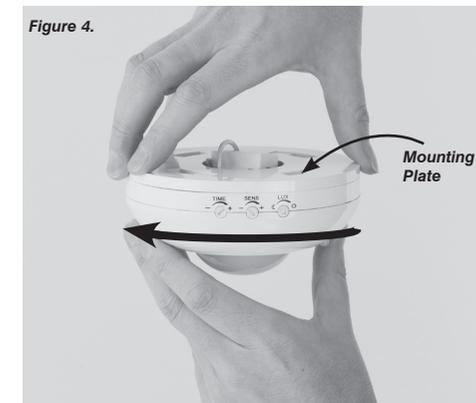


1. Remove mounting plate from main body by holding mounting plate and twisting main body anti-clockwise (Figure 4).
2. Attach mounting plate to ceiling using screws provided. Make a suitable hole in the ceiling above aperture in centre of mounting plate to allow cable entry.
3. Connect wires in accordance with Figure 3.
4. Re-attach main body of sensor to mounting plate (Figure 5).

**NOTE FOR ELECTRICIAN:**

The security Sensor should be wired to its own switch. Before installation/maintenance, the electrical supply should be isolated. Switching off the wall switch is NOT sufficient isolation to prevent electrical shock.

View from above

Figure 2B  
Reduced sensitivity**UNDERSTANDING  
THE CONTROLS****LUX – LIGHT LEVEL ADJUSTMENT CONTROL**

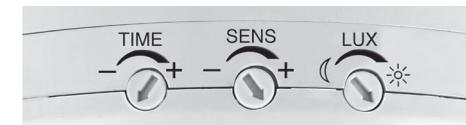
Adjusts the light level at which the Security Sensor operates. Adjust to ☀, the unit will operate day and night. Adjust to ☾, the unit will operate only at night when movement is detected.

**TIME – TIME “ON” ADJUSTMENT**

Varies the length of time the light will stay ON from about 5 seconds to 7 minutes. Turn clockwise to increase ON-time – ideal setting is about 10 o'clock position (approximately 2 minutes). Whilst there is movement within range of the unit, the light will remain ON. When no further movement is detected, the light will switch OFF after the pre-set time has elapsed.

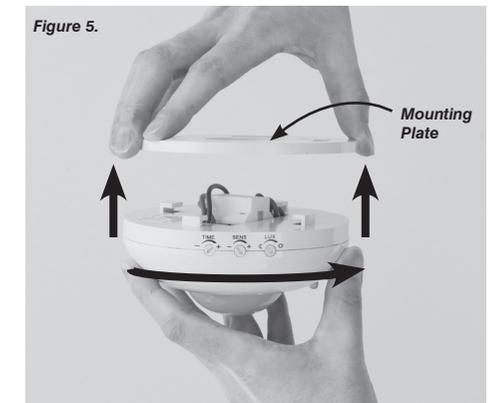
**SENS – SENSITIVITY ADJUSTMENT**

Varies sensing distance up to maximum of 6m from sensor.



**NOTE:** When in standby mode the indicating LED will show green colour. When movement is detected the colour will change to red.

**IMPORTANT:** Be careful of electrical shock. Always remember that the light may not switch ON during daylight or the light maybe in the automatic OFF mode. Never touch live areas unless fuse is removed or circuit breaker is in OFF position at the switchboard main.

**SETTING THE CONTROLS**

For best results and operation the following steps should be taken:

1. Mount the sensor above the desired area to be scanned.
2. Turn the light level control fully clockwise and time control fully anti-clockwise.
3. Turn the wall switch ON, light will come ON for 5 seconds and then go OFF, provided that there is no movement in the detection area.
4. Have another person move across the centre of the area to be scanned until the unit senses the presence of the moving person, causing the light to switch ON. You may need to adjust the sensitivity to appropriate level to avoid unwanted triggering.
5. Adjust time control (TIME ON) to required setting.
6. Turn the light level control knob fully anticlockwise.
7. Your Security Sensor is now ready for use, and will automatically operate when movement is detected at night.
8. The wall switch should remain “ON” for automatic operation.

## WARRANTY

Arlec guarantees this product in accordance with the Australian Consumer Law.

Arlec also warrants to the original first purchaser of this product ("you") from a retailer that this product will be free of defects in materials and workmanship for a period of 12 months from the date of purchase; provided the product is not used or installed other than for the purpose, or in a manner not within the scope of the recommendations and limitations, specified by Arlec, is new and not damaged at the time of purchase, has been properly installed by a licensed electrician or contractor who is licensed to install electrical products in the place in which the product was installed and in accordance with Arlec's installation instructions, has been maintained in accordance with the recommendations specified by Arlec, has not been subjected to abuse, misuse, neglect or damage, has not been modified or repaired without the approval of Arlec and has not been used for, or installed in premises which are used for, commercial purposes ("Warranty").

If you wish to claim on the Warranty, you must, at your own expense, return the product or that part of the product which you believe is defective in materials and workmanship, and provide proof of original purchase, your name, address and telephone number and a certificate of installation or other document required by law for the installation of electrical products in the place in which the product was installed issued by the licensed electrician or contractor who installed the product, to Arlec at the address below within 12 months from the date of purchase. Please note that the Warranty does not cover removal or re-installation of the product or that part of the product which you believe is defective.

Arlec will assess any claim you may make on the Warranty in the above manner and if, in Arlec's reasonable opinion, the Warranty applies, Arlec will at its own option and expense replace the product (or part of the product) with the same or similar product (or part of the product) or repair the product (or part of the product) and return it to you or refund the price you paid for the product. Arlec will bear its own expenses of doing those things, and you must bear any other expenses of claiming on the Warranty.

The Warranty is in addition to other rights and remedies you may have under a law in relation to the product to which the Warranty relates.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

# ARLEC

Arlec Australia Pty. Ltd. ACN 009 322 105 ("Arlec") gives the Warranty.  
Arlec's telephone number, address and email address are:

**Customer Service: (03) 9982 5111**

Building 3, 31 – 41 Joseph Street, Blackburn North, Victoria, 3130  
Blackburn North LPO, P.O. Box 1065, Blackburn North, 3130  
Email: [custservice@arlec.com.au](mailto:custservice@arlec.com.au)

## AUTOMATIC MODE

Turn your wall switch ON. This will put the sensor into 'automatic' mode and it will then start sensing after dusk. The light will switch ON and automatically switch OFF after the pre-set time elapses and will then operate automatically whenever heat movement is detected.

## MANUAL OPERATION (AUTOMATIC OVERRIDE)

To override the automatic mode, the sensor must be switched ON in the automatic mode. Now switch wall switch OFF, wait for 2 seconds then switch back ON. Your Security Sensor will now hold your light ON continuously just like a normal light. This override function can be selected during night time only. To return your sensor to the automatic mode, switch your wall switch OFF for at least 4 seconds, then switch it ON again. To switch your security sensor and lights OFF completely, switch your wall switch OFF.

## MAINTENANCE

To avoid dust build-up and ensure proper functioning of the Arlec Security Sensor wipe the lens lightly with a damp cloth every three months. DO not use solvents or abrasive cleaners on any part of your Security Sensor.

## SPECIFICATIONS

Detection range	6 metre at 360° scan (Approx)
Time Adjustment	Min 5 ± 3 seconds Max 7 ± 2 minutes
Detection Circuitry	Passive controlled infra red motion sensor
Power Consumption	230-240 volt, 50Hz, 0.1W (static mode) 0.45W (triggered mode)
Rating	1200 watt max Incandescent load, 300 watt max fluorescent load.*
Supply Connection	The connecting terminals are suitable for up to 2.5mm <sup>2</sup> cross-section conductors.
Classification	The Sensor is classified as independent lamp control gear and does not rely on a luminaire enclosure for protection against accidental contact with live parts.

*\*Power factor correction capacitors must be removed from fluorescent and connected at mains input of sensor.*

## TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SUGGESTED REMEDY
<b>Light does not switch ON when there is movement in the detection area.</b>	1. No main power.	Check all connections, and fuses/switches.
	2. Globe faulty or missing.	Check. Replace.
	3. Wiring incorrect.	Re-check.
	4. Nearby lighting is too bright.	(A) Relocate unit (B) Gradually turn light level control clockwise.
	5. Controls set incorrectly.	Re-set controls.
	6. Sensor positioned in wrong direction.	Re-position sensor.
<b>Light switches ON for no apparent reason.</b>	1. Heat sources such as air con, vents, heater flues, or very cold objects are near sensor.	Re-position sensor.
	2. Animals/birds e.g. possums.	Probably unavoidable but relocating sensor may help.
	3. Interference from ON/OFF switching of electric fans or lights on the same circuit as your Security Sensor. (This problem does not always occur but a faulty switch or a noisy fluorescent light may cause your lights 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 Security Sensor 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, BBQ, etc.	Re-position sensor.
	6. Reflection from swimming pool or reflective surface.	Re-position sensor.
<b>Poor sensitivity and range</b>	1. Movement directly to or away from sensor	Re-position sensor.
	2. Higher ambient temperature	Nil. Note: All passive infra red detectors are more sensitive in cold weather than warm weather.
<b>Light remains ON</b>	1. Sensor is in automatic override continuous ON mode	Switch sensor OFF for four seconds at wall switch, and then return to ON position.
	2. Time is set too long	Reduce time by turning anti-clockwise.
	3. Wiring is incorrect	Re-check wiring.

*Should a problem still exist after following all of the above user hints, contact your nearest Arlec Service Department.*