

## TROUBLE SHOOTING GUIDE:

Problem	Probable Cause	Suggested Solution
Lights will not activate when there is movement in the detection area	Power failure or power not switched on	Check connections, fuse and switches
	Faulty globe/s	Replace globe/s
	Controls incorrectly set	Change direction angle, adjust sensitivity
	Sensor aimed incorrectly	Change position and/or direction of sensor
	Incorrectly wired	Re-check all wiring
Light turns on for no apparent reason	Air conditioner or heater vents close to sensor	Change position and/or direction of sensor
	Animals or birds crossing detection area	Probably unavoidable. Change direction of sensor, adjust sensitivity
	Reflective objects in detection area	Change direction of sensor and consider repositioning
	Electrical interference on the same circuit	Check for arcing switches and replace noisy fluorescent tubes and/or starters. Consider connecting the unit to an alternative circuit
Lights will not turn off after set time has elapsed	Lights are in manual mode not automatic	Turn lights off for at least 10 seconds then turn them on again to return sensor to automatic mode
	Wiring is not correct	Recheck the wiring

The warranty for this electrical product covers defects of materials and workmanship for one year from the date of purchase, provided that the product is used according to The L&H Group recommendation and is within the limits specified. The L&H Group will at its own option make good, replace or provide credit for any product manufactured or supplied by it, which proves to be defective within the limits set out above provided that no repairs, alterations or modifications to the product have been undertaken or attempted, other than by the company or its authorised agents. Any defective product should be returned to your original place of purchase or sent Postage Paid to The L&H Group at the address shown below. The purchase receipt must be returned with the product to obtain warranty repair or replacement. This warranty is in addition to any guarantee implied by Federal or State legislation.

### PROOF OF PURCHASE

- Please retain your purchase receipt for all service or warranty claims.
- Complete details of your purchase in the section below for your own reference.

Date of purchase \_\_\_\_\_

Type of Product / Model No \_\_\_\_\_

Your Name \_\_\_\_\_

Your Address \_\_\_\_\_

Branch \_\_\_\_\_

Distributed by:

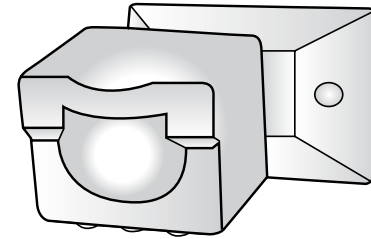
L&H Group  
456 Lower Heidelberg Road  
Heidelberg VIC 3084

The L&H Group has a policy of continual improvement throughout their product range, the unit contained may differ slightly from the unit illustrated on the pack.

For product enquiries contact our Customer Service Centre: 1300 300 254

Form No: 4508/MKT 03/11 R

# ALPHALUX



## Instructions for Alhalux SureScan™ Sensor

**Part Number: ALXPIR**  
**10A, 240V, 10 Metre Range**

### INTRODUCTION:

The Alhalux range of sensors and floodlights that includes the SureScan™ have been designed in consultation with our customer base of installers. More than 15 years of experience in light fittings and sensors have combined to create a comprehensive range of high quality solutions.

The Alhalux SureScan™ includes the following features:

- Maximum 10 Amp high power output to control multiple loads.
- High quality passive infrared (PIR) sensing circuit used to prevent nuisance switching.
- Timer, light adjustment and distance sensitivity controls.
- Full sensor head direction adjustment.
- Screw mount lock nut to prevent post-installation movement.
- Three mounting base entry ports for flexible sensor head positioning.
- 20mm threaded mounting base suits common conduit and fitting entries.
- O-ring sealed to maintain IP rating and exclude water and dust.
- Unit base fits typical mounting boxes with 84mm mounting centres.
- Rubber seals supplied for fixing to flat mounting surfaces.
- Includes insulated connectors for faster and more convenient installation.
- Heavy-duty UV stabilised plastic.
- Includes matching mounting box for additional termination space and easy fitment.

### INSTALLATION:

Note: This product must be installed by a qualified electrician and in accordance with the appropriate wiring rules and regulations.

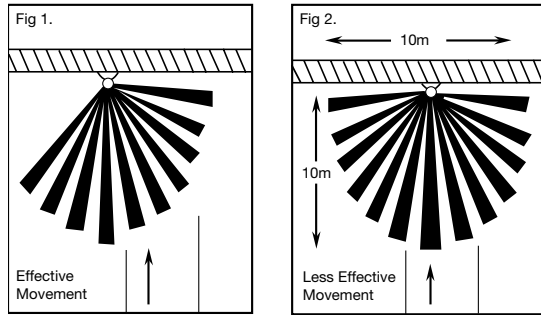
Ensure that all electrical supplies are isolated at the switchboard before installation or maintenance of these fittings takes place.

### FINDING THE BEST LOCATION:

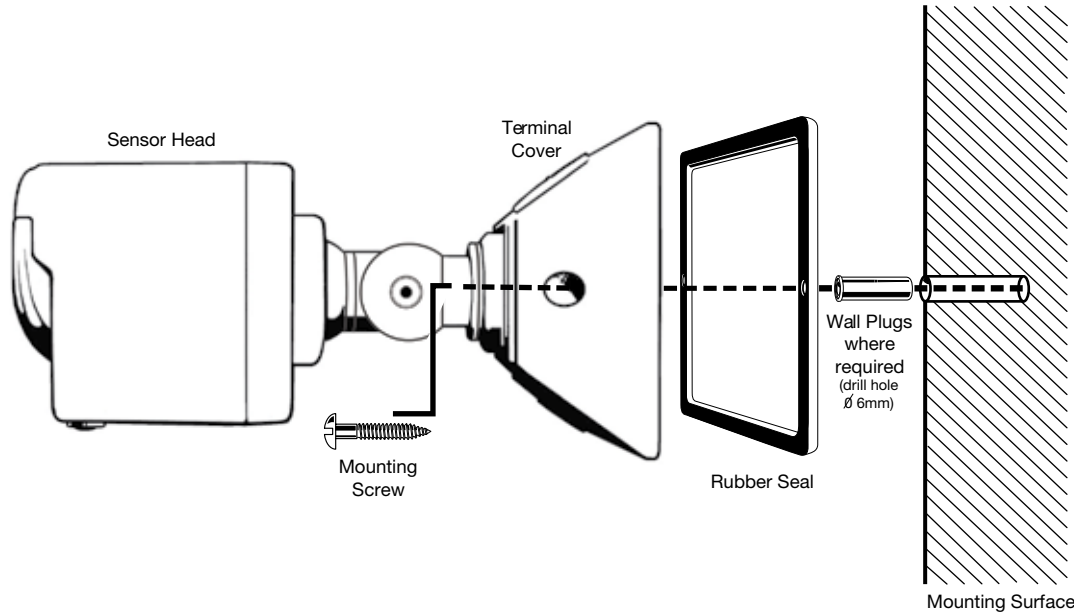
The position of passive infrared sensors (PIR) is critical to their performance and vital in reducing nuisance triggering. The following guidelines should be followed to maximize the performance of the units:

- The unit should be a minimum of 2.4 metres above the area that is being monitored.
- For best performance the path of motion should be across the field of vision of the sensor. Head-on detection is the most unreliable method of sensing. (Refer to diagram)
- To avoid incorrect tripping of sensor, do not mount close to electrical devices which produce electrical interference (RFI noise). Avoid fluorescent fittings, ceiling fans, remote control doors etc. Older versions of these devices in particular.

- Do not install sensor pointing directly into sunlight.
- Avoid installing the sensor where exposed to strong reflections such as windows and swimming pools.
- Heat sources can trigger PIR sensors. Installations close to BBQ's, chimneys, exhausts and flues should be avoided. (Note: It is strongly recommended that the sensor be located where floodlight heat cannot trigger the sensor).
- The installed sensor should be pointing down-wards where possible.
- To avoid false triggering by animals, direct the sensing zone above the expected height of animals.



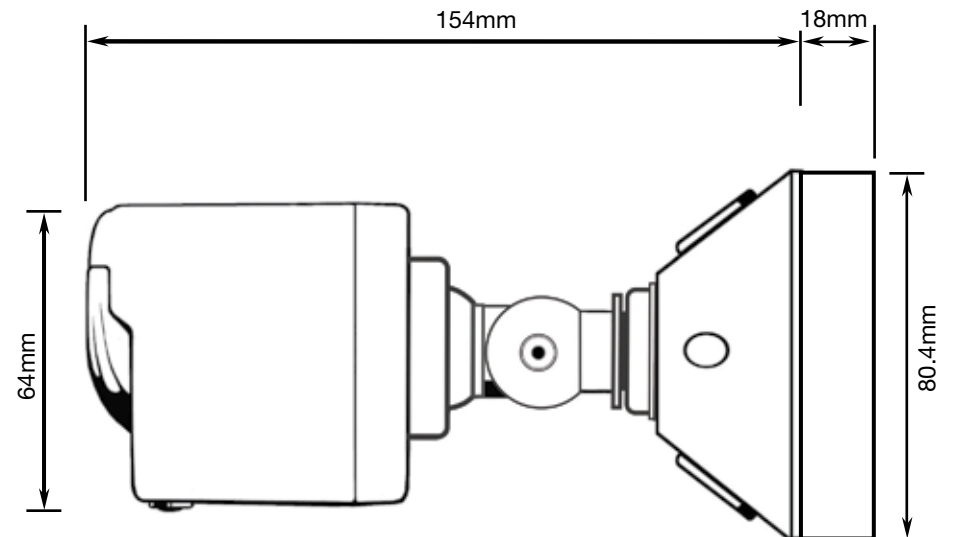
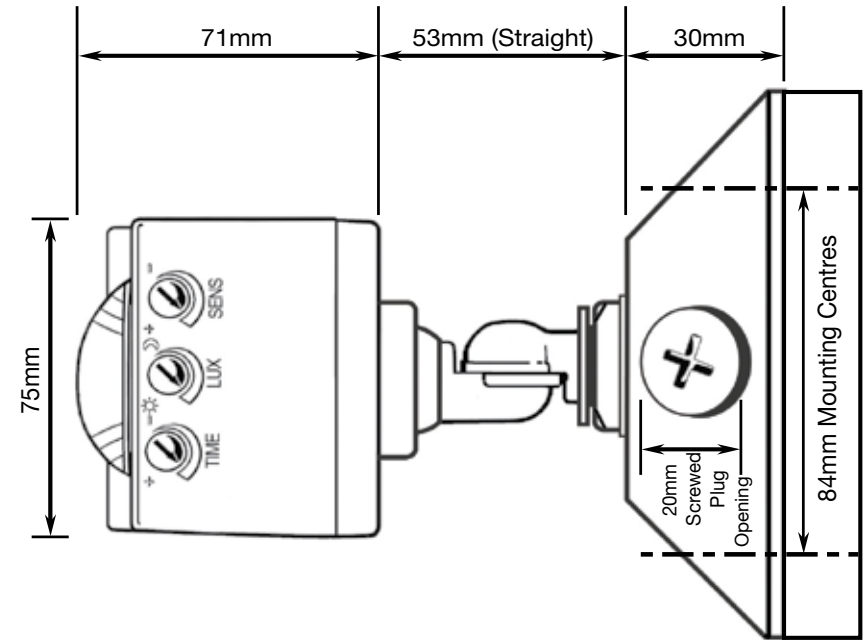
SureScan™ detects movement across a series of zones. This special feature is maximised if SureScan™ is mounted in a position in which traffic moves obliquely through the field of detection (fig.1) instead of moving toward the sensor (fig.2).



**TYPICAL SURFACE MOUNTING INSTALLATION DIAGRAM**

**Note: Additional sealing may be required to create the required weather rating**

**DIMENSIONS:**



**Note: SureScan™ shown fitted to mounting box as supplied**

### AUTOMATIC OPERATION (sensor driven):

To put the unit into automatic sensing mode.

1. Turn the light power switch off for approx 5 seconds and then turn back on. The floodlight will illuminate immediately and remain on for the pre-set time period as described above. Once the pre-set time period has elapsed the lamps will go out and the unit will then operate automatically as per the presets described above.

### MANUAL OPERATION (sensor override):


The unit is assumed to already be in the automatic mode as described above and the light switch is in the 'ON' position.

To change from automatic to manual at any time during the day or night:

1. Turn the light switch off and immediately back on within one second.
2. The unit is now in manual mode and the light will remain ON continuously.
3. To return to automatic mode follow the instructions for Automatic Operation.

**Note: To turn the floodlight off completely, simply turn off the wall light switch. To return to 'automatic Operation' mode repeat the above instructions if required.**

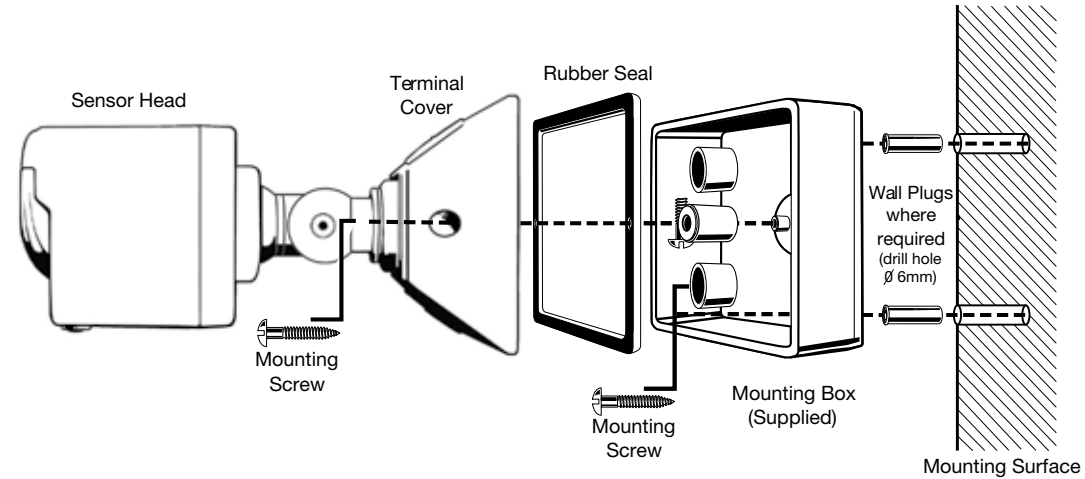
### Technical Specifications

Characteristic	Rating
Rated Voltage	240 V +/- 10%
Rated Frequency	50/60Hz
IP Rating	IP66 (with supplied mounting box)
Time Adjustment	5 Seconds to 7 minutes
Sense Adjustment	0 to 10 metres @ 180 degrees
Lux Adjustment	Full daylight to darkness
Maximum Load	2400 Watts (resistive)
Weight	311 Grams
Mounting Hole Centres	84mm Surface mounting 90mm Using mounting box
Load Cables (Red & Black)	AWG 18 Rated to 105C
Power Supply (Brown & Blue)	0.75mm <sup>2</sup> Rated to 105C
Safety Standards	AS/NZS 60598 AS/NZS 60529 CISPR15
Certifications	ISO 9001 QA Procedures
Symbols	

### MOUNTING BOX INSTALLATION

Where the installer requires additional space or wishes to create a continuous conduit path, the sensor can be mounted to the supplied matching mounting box. See diagram below for the mounting method.

Note: Under this method, the supplied mounting box screws must be used to secure the light base to the mounting box.



### TYPICAL MOUNTING BOX INSTALLATION

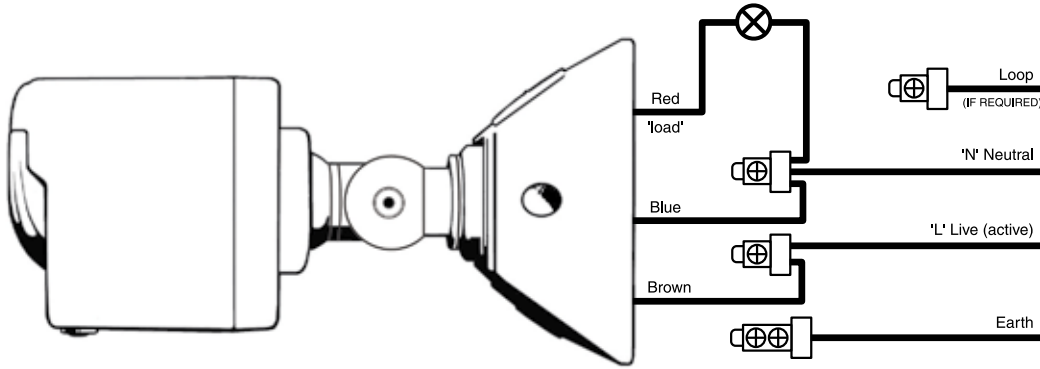
#### POSITIONAL ADJUSTMENTS:

#### SENSOR HEAD ADJUSTMENTS

The sensor head can be adjusted by three methods:

1. Ball joint adjustment - The sensor head can be raised, lowered, or rotated on its base by the ball joint. In most cases, fine tuning can be done with this method.
2. Knuckle adjustment - Allows greater movement, in all directions when used with the lock nut adjustment.
3. Lock nut adjustment - Spin the sensor clock or anti-clockwise or remove and reposition the entire head into one of three openings for maximum directional flexibility.

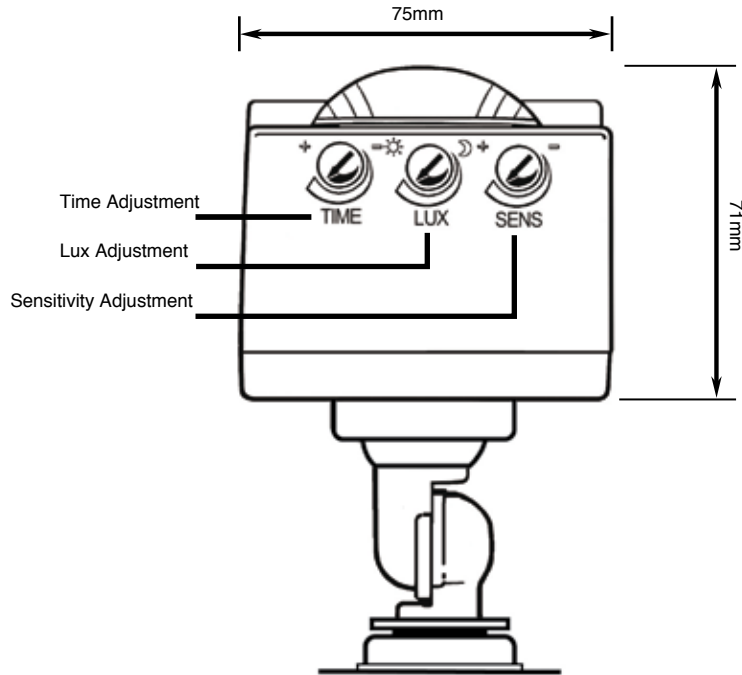
It is important that the sensor head lock nut and knuckle screw are sufficiently loose prior to making 2 adjustments and re-tightened on completion.



**TYPICAL WIRING DIAGRAM**

**ADJUSTING THE CONTROLS:**

It is assumed for the purpose of these instructions that the sensor will be connected to a floodlights (total load <10 amps).



**ADJUSTMENT CONTROLS DIAGRAM**

The controls for 'TIME', 'LUX' and 'SENS' (sensing distance) are all adjusted from the base of the sensor head and are adjusted by the use of a small flat screwdriver. Care should be taken not to apply excessive force to these controls.

**TIME CONTROL**

The 'TIME' control adjusts the length of time that the sensor remains on after being triggered. The time can be adjusted from a minimum of 5 seconds (-) to a maximum of 7 minutes (+). This control can be adjusted at any time with immediate effect however adjustments during the 'on' cycle should be avoided.

**LUX CONTROL**

The 'LUX' control allows the user to determine at what level of background light the unit will function. If the control is moved to the sun position ☀ the unit will trigger under full daylight conditions and if the control is moved to the moon position ☾ the units will only trigger in complete darkness.

As a guide the setting for triggering at dusk is when the control is ¾ the way between the ☀ and ☾ symbols.

Tip: To ensure triggering at your preferred light level, your initial set-up adjustment should be carried out at the time of day you require your lights to illuminate. When the ambient light has reached your preferred level, simply adjust your sensor to the point where your flood light illuminates.

**SENSING DISTANCE CONTROL**

The 'SENS' control allows the user to control the distance at which the unit will detect movement. Moving the control (+) position sets the sensing range to maximum (approx.10 metres), while moving the control to the (-) position sets the sensing range to a minimum (approx.1 metre).

**SET UP AND ADJUSTMENT**

Initial set up can be made during normal daylight hours with the final 'LUX' adjustment made later during the required ambient light level:

1. Turn the power to the unit off at the wall light switch.
2. Adjust the 'TIME' control to minimum (-) on time.
3. Turn the 'LUX' control to ☀ for daylight operation setting.
4. Turn the power on. (Note: Floodlights will remain on for approx. one minute as the unit resets and warms up.)
5. Direct the sensor head window towards the area that requires monitoring.
6. Create movement in the monitored area and adjust the 'SENS' control until the correct triggering distance has been achieved.
7. Increase the 'TIME' adjustment to your required floodlight illumination time.
8. The 'LUX' adjustment can also be made at this time, however its strongly recommended that the final adjustment to the 'LUX' control is best made at the time of day when the background lighting level is correct.

**AUTOMATIC OR MANUAL MODE OPERATION**

Your sensor unit can be operated in either an automatic or manual over-ride mode.

- The automatic mode will function as described above with the floodlights triggered by motion and remaining illuminated for the selected time.
- The manual over-ride will allow the floodlights to remain on continuously.

The user can switch between manual and automatic modes with the light power switch.