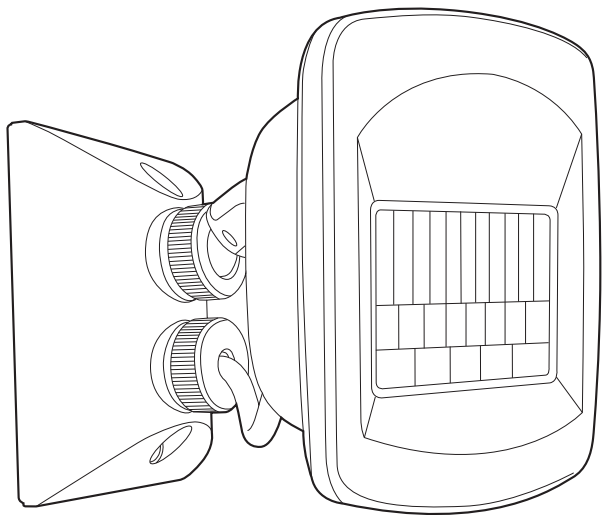




**INFRARED SENSOR**

# **I N S T R U C T I O N S**



**Model No: 55-190 (White) 55-191 (Black)**



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# INTRODUCTION

The Housewatch infrared sensor is suitable for installation on walls and ceilings in a range of outdoor locations including entrances, gardens, staircases, garages and parking areas.

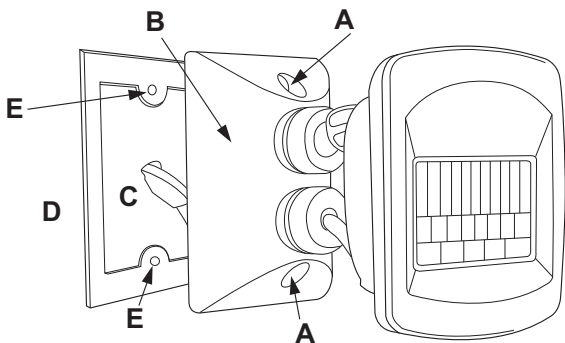
## IMPORTANT SAFETY INSTRUCTIONS

Please follow these instructions carefully before attempting to install and operate this sensor.

- ⚠ Ensure power is isolated before performing any work on the sensor
- ⚠ Ensure the voltage marked on the product is the same as the electrical power supply to be used
- ⚠ DO NOT mount on a conductive surface
- ⚠ Must be installed by a licensed electrician in accordance with AS/NZS 3000:2018

# INSTALLING THE INFRARED SENSOR

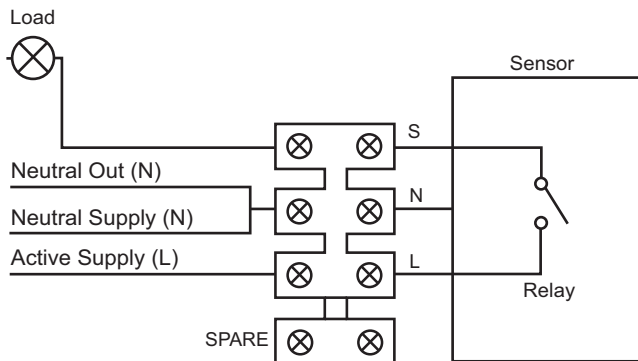
1) Switch power OFF at meter box.



**FIGURE 1**

- 2) Refer to FIGURE 1. Use the holes (A) on the Mounting Base (B) to mark the position of the fixing screws on the selected mounting surface once the mounting position has been established.
- 3) If wall plugs are to be used for securing the base of the unit, drill to a depth of approximately 40mm, and fit the supplied plastic wall plugs. Take care not to drill into concealed electrical wiring or other services. Wall plugs must be pushed in until flush.
- 4) Drill a suitable hole to accommodate the electrical cable mounting plate (C) between the other two mounting holes for electrical connections (E).
- 5) Ensure gasket is positioned over wiring before connecting (D).
- 6) Pull through electrical cable in preparation for connection to the sensor.

# INSTALLING THE INFRARED SENSOR



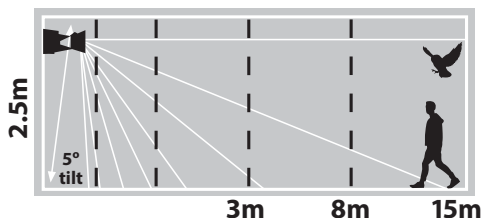
**FIGURE 2**

- 7) Connect the cable to the terminal block provided as per FIGURE 2.
- 8) Remove protective backing from self-adhesive foam gasket (D) as per FIGURE 1.
- 9) Attach the self-adhesive foam gasket to the rear of the sensor mounting base, aligning the holes in the gasket (E) to the wall plugs as per FIGURE 1.
- 10) Fit the sensor mounting base (B) to the wall using screws provided and ensure it's tightly secured to maintain IP rating.
- 11) Tighten adjusting nuts to seal the cable and lock the head in place.
- 12) Ensure that associated lighting loads are correctly installed according to Australian Wiring Rules.
- 13) Reconnect power.

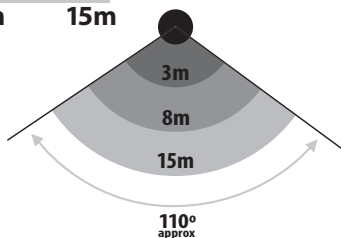
# SET UP AND OPERATION

The outdoor sensor is equipped with a highly sensitive PIR (Passive Infrared) motion detector. A multi-cell technology fresnel lens is used to divide the sensor's basic detection range into multiple separate segments or zones. The sensor automatically scans for movement between zones.

The outdoor sensor will provide optimal performance and range when installed in a vertical position approximately 2.5m above the ground; as is shown in the diagrams in FIGURE 3 below. The sensor head can be adjusted to allow optimal coverage of the detection area. The horizontal coverage zone can reach up to 15m with an angle of 110°.



**FIGURE 3**

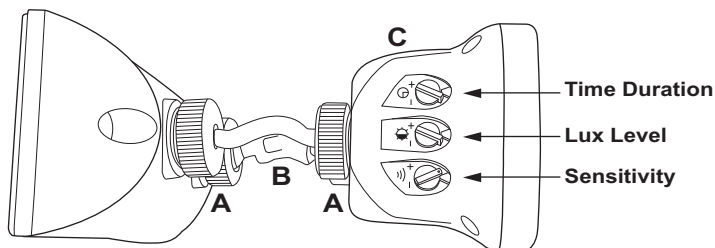


To adjust sensor head refer to FIGURE 4.

Simply loosen the two ball joint locking nuts (A), located at either end of the sensor arm (B), adjust sensor head (C) and tighten nuts (A).

**NOTE:** Always loosen locking nuts on the sensor before adjusting. Failure to do so can damage the sensor or crack the lock nut.

# SET UP AND OPERATION



**FIGURE 4**

## **Time Duration:**

The length of time the sensor will activate a load after detection can be adjusted from 10 seconds to 10 minutes. Rotating the time knob (marked with the clock) anti-clockwise will reduce the duration time.

## **Lux Level:**

The sensor has a built in photoelectric cell that automatically detects daylight and darkness levels. Rotating the lux control knob anti-clockwise (marked with the day/night image), will ensure that the sensor only works at night. By rotating the lux control knob clockwise, the sensor will work in both daylight and at night depending on the application - this setting is primarily used for testing the sensor after installation.

## **Sensitivity:**

The sensitivity control (marked with the sensor symbol) allows you to adjust the sensitivity of the sensor. This adjustment is useful to adjust the sensitivity of the PIR to prevent false triggering and to adjust the detection range. Unless required, the sensitivity adjustment should be operated with the knob turned fully clockwise.

# SET UP AND OPERATION

## Walk Test

- 1) Rotate the lux knob fully clockwise for daylight operation, set the time control to min (Anti-clockwise) and the sensitivity to maximum (clockwise).
- 2) Turn on the power at the isolating switch. The load should turn on for a short period of time.
- 3) Wait 30 seconds for the circuit to stabilise.
- 4) If not already adjusted, direct the sensor toward the desired area, adjusting the elbow joint on the sensor arm. Loosen all nuts on the sensor before adjusting.
- 5) Have another person move across the centre of the detection area and slowly adjust the angle of the sensor arm until the load switches on. Your sensor is now aimed at your selected area.
- 6) Adjust the time control to the desired level.
- 7) Adjust the sensitivity (if required) to limit detection range. This can be tested via walk testing.
- 8) Adjust the lux control by rotating anti-clockwise to revert to night time operation. If the load is required to switch on earlier, e.g. dusk; wait for the desired light level, and slowly turn the lux knob clockwise while someone walks across the centre of the detection area. When the load switches on, release the lux control knob.

## Manual Override Feature

When the power is initially turned ON, the sensor operates in AUTO mode. In this mode, the sensor turns the load ON and OFF automatically.

The manual override function means that the sensor can be put permanently "ON". In this mode the PIR sensor is disabled.



# SET UP AND OPERATION

## Resetting the Sensor into “Manual Mode”

- 9) To bypass the “auto mode” and set the sensor into “manual mode”, turn the wall switch “OFF” and “ON” once within 3 seconds.

Wall switch action: OFF > ON.

- 10) Wait for 3 seconds and the light will turn “ON” permanently and the sensor will be in the “manual mode”.

Note: If the wall switch action is done more than twice, the sensor may not enter into “manual mode”.

## Setting the Sensor into “Auto Mode”

- 1) To change back to “auto mode”, turn the power “OFF” and wait for about 10 seconds, then turn it back “ON” again turning the switch “ON” once only.
- 2) Wall switch action: OFF, wait 10 seconds > ON
- 3) The PIR sensor will enter into the “warm-up” mode and the load will stay “ON” for 10 seconds, then will turn “OFF”.

The sensitivity control (marked with the sensor symbol) allows you to adjust the sensitivity of the sensor. This adjustment is useful to adjust the sensitivity of the PIR to prevent false triggering.

- 4) Now wait for about 10 seconds for the circuit to stabilise and the sensor will operate now in “auto mode”.

# TROUBLESHOOTING

Problem	Possible Cause	Suggested Solution
Load does not turn off	1) Auto off time is set too long  2) Sensor is nuisance triggered  3) Incorrect wiring	1) Set auto off time to a shorter time and check if the load is switched off or not according to the preset off time  2) Keep away from detection coverage to avoid activating sensor while doing the test  3) Refer to wiring diagrams for correct connection
Load does not turn on	1) Exceeding the detection range  2) No power is supplied  3) Incorrect wiring	1) Walk in the effective detection range  2) Switch on the power  3) Refer to wiring diagrams for correct connection
Nuisance triggered	There are heat sources, highly reflective objects or any objects which may be swayed in the wind within the detection coverage	Avoid aiming the sensor towards heat sources, such as air conditionings, electric fans, heaters or any highly reflective surfaces. Make sure there are no swaying objects within the detection coverage.

# TECHNICAL SPECIFICATIONS

<b>Rated Voltage</b>	220-240V ~ 50/60Hz
<b>Rated Load</b>	<b>For Lighting</b> LED Lamp: Max. 1000W Tungsten lamp: Max 2000W Fluorescent lamp: Max 1000W
<b>Detection Angle</b>	110°
<b>Detection Range</b>	15m Max (24°C) (adjustable)
<b>Auto Time Off Adjustment</b>	Adjustable from approx. 10 seconds to 10 minutes $\pm$ 2 minutes
<b>Lux Adjustment</b>	Adjustable from <10Lux to 2000 Lux
<b>Meter Adjustment</b>	Adjustable from approx. 2m to +15m at height of 2.5m
<b>Operating Temperature</b>	-10°C to +40°C
<b>Environmental Protection</b>	IP66 (outdoor use)



Installation of electrical equipment must be carried out by a qualified electrician.  
Contact a qualified electrician in the event of fault or break down.



# MANUFACTURER'S WARRANTY

This Housewatch product is guaranteed for a period of 2 (Two) years from date of purchase, provided the product has been installed in accordance with this instruction manual and local electrical wiring regulations and codes of practice.

This guarantee shall become invalid if this product has been incorrectly installed, misused, tampered with or accidentally damaged.

If the goods are defective, we undertake to repair or replace the goods or any part of them that is defective; or provide again or rectify any services or part of them that are defective; or wholly or partly recompense you if they are defective.

This guarantee is in addition to other rights and remedies available to consumers, all of which are given by us to you if you are a consumer. 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. If you wish to make a warranty claim, please return this product to the original place of purchase together with your purchase receipt, or contact us using the below details.

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