# COBRA IP65 WEATHERPROOF MOTION SENSOR

DESIGNED BY AUSTRALIANS, FOR AUSTRALIA

## SUMMARY

The MATelec Australia Cobra Motion Sensor is an extremely reliable, IP65 rated PIR motion sensor, at an exceptionally competitive price. The Cobra is also suitable for LED lighting.

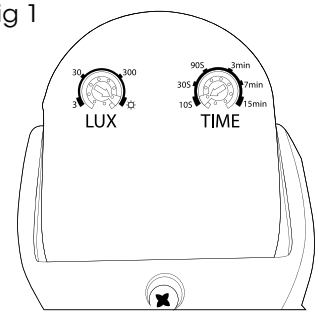
## SPECIFICATIONS

| | |
|---|---|
| Power Source: | 220V - 240VAC |
| Power Frequency: | 50HZ |
| Ambient Height: | 3 - 2000 LUX (adjustable) |
| Time delay: | 10 seconds - 15 minutes |
| Rated Load: | 1200W (Incandescent)<br>300W (Fluro) |
| Detection distance: | up to 12m |
| Detection range: | 180° |
| Installation height: | 1.8m - 2.5m |
| Power consumption: | 0.5W |
| Wire: | 3 wire |
| Manual override: | Yes |
| Warranty: | 5 years |

## OPERATION

With power applied, and a suitable load connected, the Cobra will be able to detect any moving infared source. The unit has a number of detection zones, at various vertical and horizontal angles.
The Cobra has two adjustments on the underside of the sensor head as shown on Fig 1.

Fig 1

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The **LUX** adjustment activates the load dependent on the ambient light level in the 'field of view' of the sensor. This adjustment can be set to allow the Cobra to operate the load at any light level between full daylight and almost complete darkness.

The **TIME** adjustment can be set for any period between 10 seconds and 15 minutes. This is the time that the lights will remain on after the last movement was detected. If movement is detected when lights were already on, the timer automatically restarts.

# MANUAL OVERRIDE

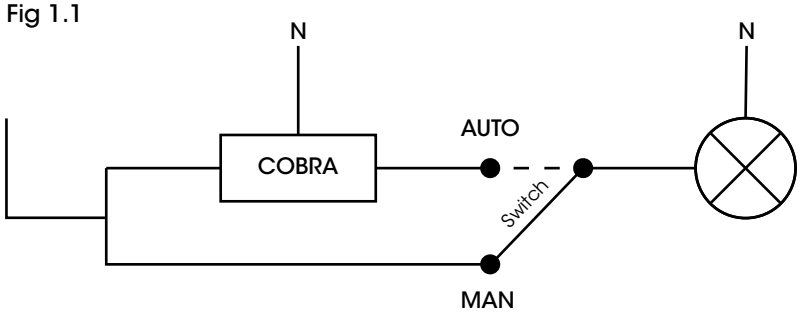
**Permanently On:** Switch the unit off, then on again, twice, within 3 seconds. The unit will stay on permanently.

**8 Hour On:** Switch the unit off, then on again, within 0.5 seconds. The sensor will remain on for 8 hours, after which time it will revert to ordinary sensor mode.

# SWITCH CONFIGURATION

**The Cobra sensor need to be continuosly energized, so it is important to ensure manual override switch is between the sensor and the load, as per Fig 1.1, and not switching prior to the sensor**

Fig 1.1




# LOCATION

The Cobra needs to be carefully positioned to ensure optimum performance. Maximum 'field of view' is achieved when the sensor is at a height of 2.5m.

Avoid positioning the sensor where there are any sources of heat in the detection zone. Such sources include extractor fans, heater flues, tumber dryer exhaust etc.

Reflective surfaces, e.g. pools of water, high gloss white painted walls, or overhanging branches, may cause false activation under extreme conditions.

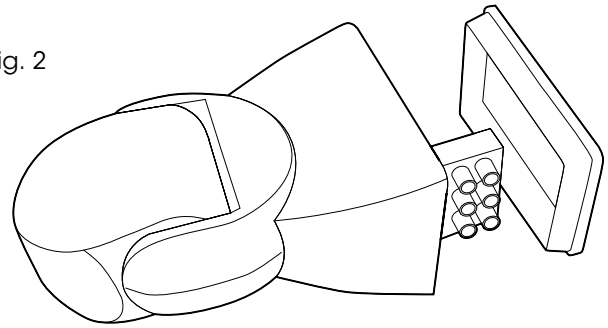
# MOUNTING PROCEDURE

Warning: All electrical connections related to this installation must be carried out by a suitably qualified electrician.

Installation must be carried out according to local wiring rules (AS/N2S3000)

The Cobra is mounted as shown Fig.2.

Fig. 2



1. Isolate the power

2. Select a suitable location, as referred to in the previous section

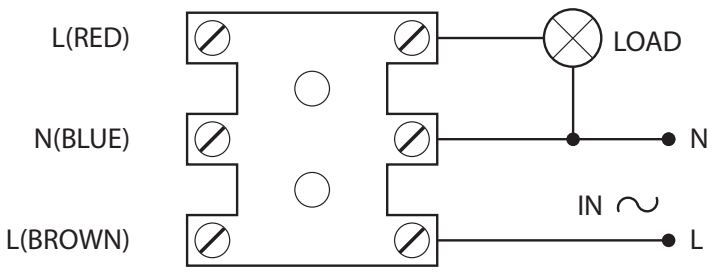
3. Remove the mounting plate from the product base by undoing the small screw

4. Pass the cable through the mounting block

5. Install the mounting block on the surface, using the supplied hardware

6. Connect the cabling as per connection wiring diagram below (Fig. 3)

Fig 3




7. Ensure connections are correct and secure

8. Adjust the TIME and LUX settings as per Fig.1

9. Mount the unit onto the mounting plate using the fixings supplied.

10. Adjust the sensor head accordingly. The sensor head can adjust vertically 180° and horizontally 45°.

Fig 4

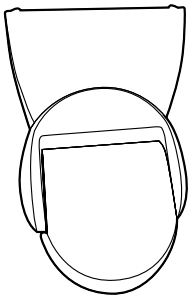


Fig 5

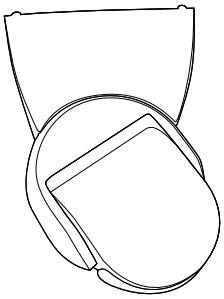


Fig 6

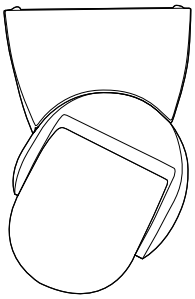
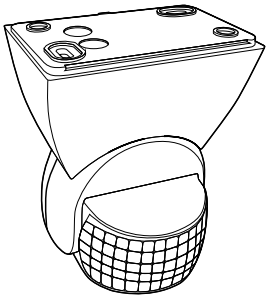


Fig 7



# TROUBLESHOOTING

| PROBLEM | POSSIBLE SOLUTION |
|---|---|
| The connected lighting does not switch | a.) Check wiring connections are sound and secure<br>b.) Check the connected lights and lamps are sound<br>c.) Check the lux level settings are suited to ambient levels |
| Light turns on in daylight | a.) Adjust LUX settings |
| Light does not turn on in dim or dark conditions. | a.) Adjust LUX settings<br>b.) Check globe in light not blown. |