

INSTALLATION INSTRUCTIONS

IMPORTANT

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE FIRST USE.



Weight: 0.29kg
120mm x 150mm
EPA* = 0.018

MXD6821BLK-SEN



Weight: 0.39kg
200mm x 150mm
EPA* = 0.03

MXD6822BLK-SEN

*Effective projected area unit is m²

SECURITY FLOODLIGHT WITH PIR SENSOR HARDWIRE

Mercator Warranty*

Mercator guarantees this product against defects of materials and workmanship for a period of 12 months from the date of purchase provided the product is used for its proper purpose, in accordance with Mercator's recommendations and within such voltage and current limits as are specified by Mercator in relation to the product. Mercator will at its own option and cost make good, or replace this product with the same or similar product and return it to you, or provide a 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 by anyone, other than Mercator or its authorized agents. Should you wish to make a claim under this guarantee, the product and proof of purchase must be returned pre-paid by you to the place of purchase.

This guarantee is in addition to and does not take away from any other rights and remedies you may have under any relevant law.

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.

Please retain your proof of purchase for all warranty claims.

For all Sales & Warranty enquiries

Mercator Pty Ltd (ACN 005 946 958)
Caribbean Park, 36 Lakeview Drive, Scoresby, Victoria 3179
P.O. Box 2596, Rowville LPO, Rowville, Victoria 3178
For sales and product information telephone
Customer Service: 1300 552 255

MRIN007297

 mercator.com.au

PRODUCT SPECIFICATIONS

Product Name: **Lumio**
 Models: **MXD6821BLK-SEN:10W**
MXD6822BLK-SEN:20W
 Description: **COB Light with PIR Sensor**
 Rated Voltage: **220-240V ~ 50Hz**
 Weatherproof rating: **IP54 (Use indoor or outdoor)**

Motion sensor
 range: **10m(+/-2m)**
 Motion sensor
 detection angle: **180°**
 Time adjustment: **Min 5 Sec to Max 5min (approx.)**
 Override function: **Yes**

LIGHT HEAD SPECIFICATIONS (FOR INDIVIDUAL LIGHT HEAD)

Power: **10W**
 Colour temperature: **4000K (Natural White)**
 Light Output: **790lm**
 Efficacy: **79lm/W**
 Beam angle: **100°**
 CRI: **>80**

Installation should follow the latest AS/NZS3000 wiring rules.
 These products **MUST** be installed by a qualified electrician **ONLY**.

SAFETY PRECAUTIONS

- Before obtaining access to terminals, all supply circuits must be disconnected.
- The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.
- To prevent damage to the appliance do not use alkaline cleaning agent when cleaning. Use a soft cloth and a mild detergent. Always switch off before cleaning and allow some time to cool.
- Loosen screws on sensor and lamp holders before making any adjustments.
- Make sure the connections are correct before switching power on.
- Maximum mounting height is 5m.

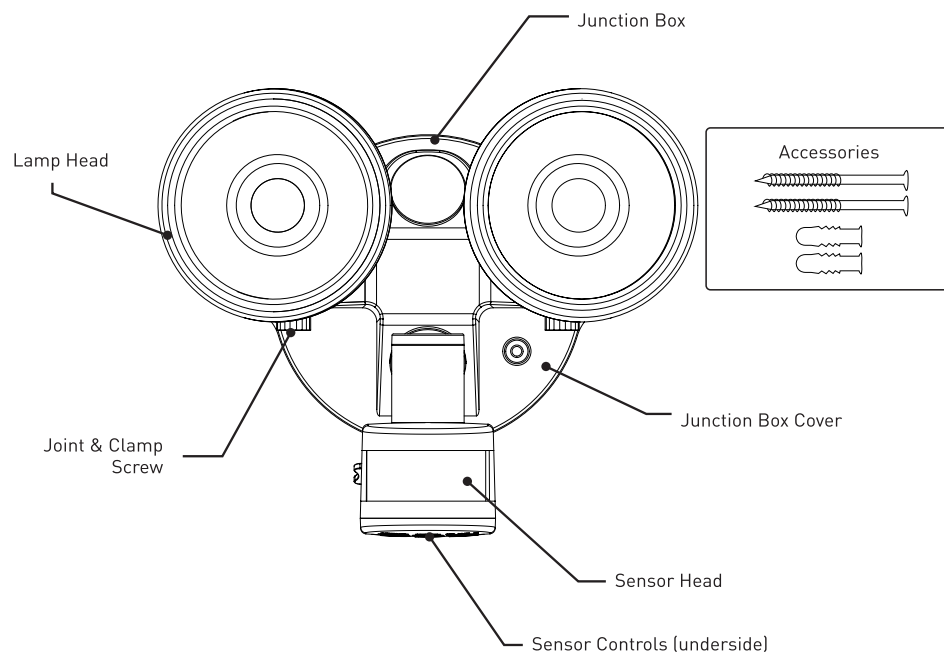
After unpacking, inspect each component for damage that may occur during transit. If the unit has been damaged, **DO NOT COMMENCE INSTALLATION**.

Return the complete product to place of purchase for inspection, repair or replacement.

INTRODUCTION

The Mercator MXD6821BLK-SEN & MXD6822BLK-SEN are compact single and double head sensor operated floodlight units provided with COB light head. When movement is detected within the range of the sensor, the light will switch on automatically, illuminating the pathways, steps, patios, porches or any other selected area for reasons of safety, convenience or security.

FIGURE 1



Note: Installation and wiring must be performed by a licensed Electrician.

WHERE TO FIT YOUR SENSOR FLOODLIGHT

To achieve best results for exterior use, your Movement Activated Floodlight should be securely mounted to a wall or under eaves.

For ideal operation the sensor head should be located approx 2.5m above the area where movement is to be sensed. This will provide the best scanning sensitivity and detection area.

- Although this product is weatherproof it is preferable to mount your Floodlight in a sheltered or semi-sheltered location with lampholder axis below horizontal.
- To avoid damage to unit - do not aim the sensor towards the sun.
- To avoid nuisance triggering, the sensor should be directed away from heat sources such as BBQ's, air conditioners, other outside lighting, flue vents and moving cars.
- Do not aim towards reflective surfaces such as smooth white walls or swimming pools etc.
- The scanning specifications (10m at 180° scan) may vary slightly depending on the mounting height and location. (Refer Fig. 2) The detection range of the unit may also alter with temperature change.
- Before selecting a place to install the Floodlight, you should note that movement across the scan area is more effective than movement directly toward or away from the sensor. (Refer Fig. 3A). 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. 3B).
- Avoid locating your Floodlight in close proximity to fluorescent light fittings or ceiling fans on the same electrical circuit. RFI interference may cause the Floodlight to switch on inadvertently.

Sensor can be angled above animal height to avoid nuisance triggering of lights

FIGURE 2

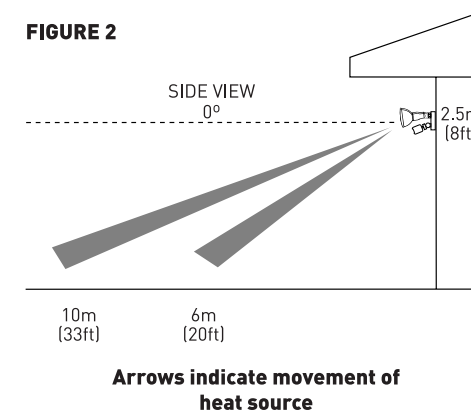


FIGURE 3A

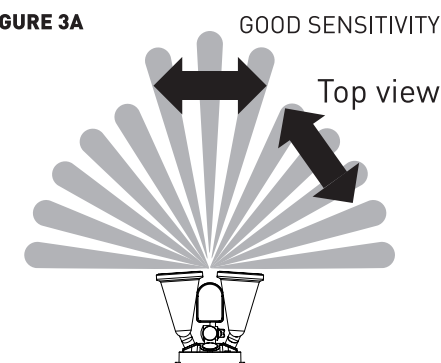
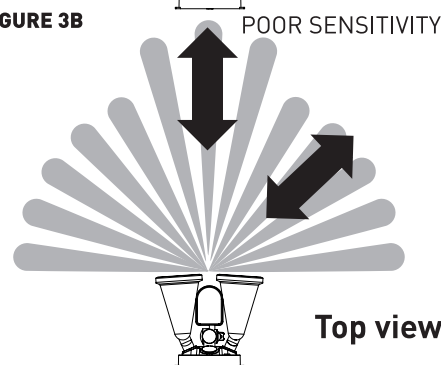


FIGURE 3B



INSTALLATION

Installation and wiring must be performed by a licensed Electrician.

WALL MOUNTING

Place the junction box over the position for mounting and mark the screw holes. Use the two mounting holes on the inside of the junction box, and ensure the "TOP" marking points upwards. Drill suitable holes, then feed the supply cable through the rubber seal on the rear of the junction box. Before fixing the junction box in place, seal any hole in the wall through which the supply cable passes so as to weatherproof it. Now fit screws to fix junction box to the surface, again ensuring the 'TOP' marking is pointing upwards.

EAVE MOUNTING

Use a similar procedure to wall mounting, but the "TOP" marking should point towards the outside of the eave. We suggest 2 x spring toggle screws (not supplied) be used to mount your Floodlight under eaves. Take care not to damage or pierce concealed wiring with mounting screws, particularly when mounting under eaves.

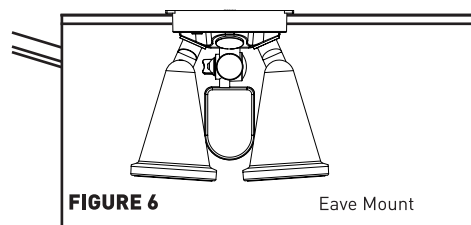
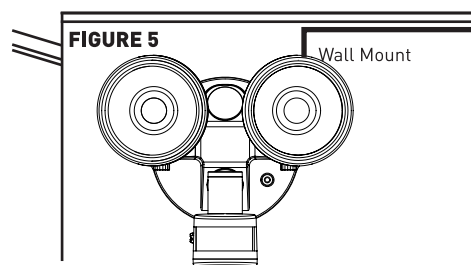
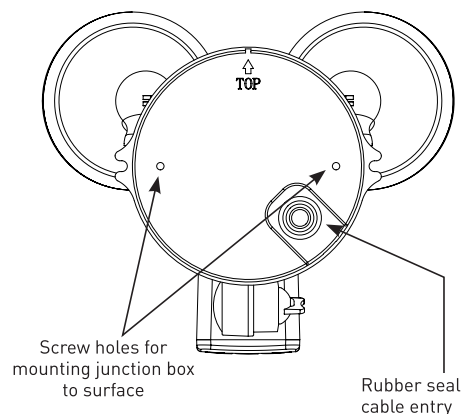
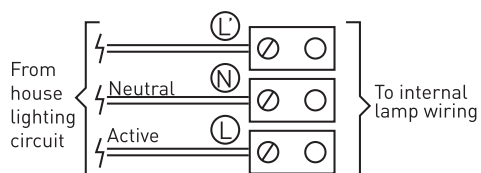


FIGURE 4



WIRING

Your Floodlight must be wired to its own switch. Do not interconnect with other lights on same switch. For installation/maintenance purposes the electrical supply must be isolated at the switchboard by removing the fuse or switching the circuit breaker OFF. Simply isolating the electrical supply at the wall switch is not sufficient isolation to prevent an electrical shock. The Switched Active (white) is permanently wired to the light fittings. NOTE: DO NOT attempt to modify the Switched Active circuit. Connect in accordance with below figure.



After wiring fit the Floodlight mounting base onto the junction box using screws provided. Ensure that the mounting base is in the correct direction so that the sensor head controls will face downwards (See Fig. 5 and 6), and that the rubber seal on the rear of the mounting plate is correctly positioned.

SETTING UP

Do not overtighten or use excessive force when adjusting sensor head or lamp holders. Loosen elbow/joint screws to make adjustment and swivel at base.

- Adjust the direction of the sensor arm and lampholders to suit the desired detection area. Loosen elbow screws on lampholder before making any adjustments. Do not use excessive force when making adjustments to lampholders (See Fig. 7).
- Angle sensor slightly downward towards the detection area. The sensor joint should be rotated to adjust the sensor to face the required detection area. If necessary, loosen sensor arm joint clamp screw.
- Angle lampholders from mounting surface and direct them approximately downwards away from sensor head.

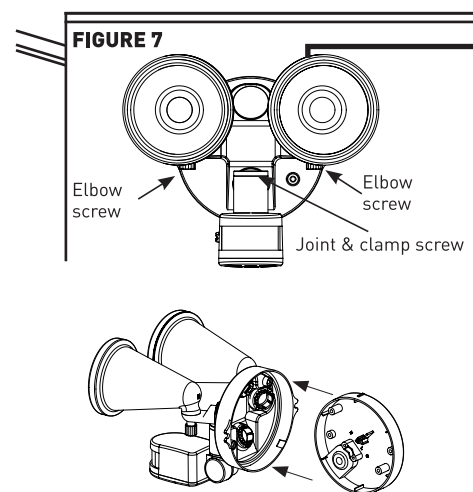


FIGURE 8

OPERATION

UNDERSTANDING THE CONTROLS

TIME - TIME "ON" ADJUSTMENT

The time "ON" control adjusts the time that the lights will remain on after the unit has sensed movement. To increase time, turn the knob clockwise. To decrease, turn knob anti-clockwise.

LUX - LIGHT LEVEL ADJUSTMENT

The "Lux" control adjusts at what level of light the unit starts sensing at dusk. This control can be also used for testing the unit during daylight hours. To test unit, or operate during the day, turn control knob all the way clockwise to the ☀ position. Once unit has been tested the "Lux" control should be set to approx. half way, and adjusted later if required.

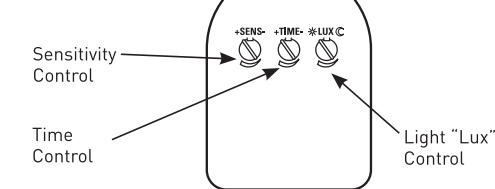
SENS - SENSITIVITY ADJUSTMENT

The Sensitivity control adjusts the level of sensitivity of the infrared Sensor. This controls the amount of movement that is required to switch the lights on. With the knob set to minimum, the unit will only detect large amounts of movement. It is recommended that in most situations the unit be operated with the "Sens" control set to half.

SETTING THE CONTROLS

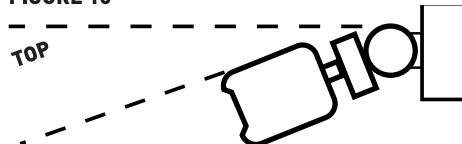
- Turn the "LUX" control (light level control) to ☀ position, the "TIME" control to minimum and the "SENS" control to minimum.
- Turn the wall switch ON and wait for half a minute for the control circuit to stabilise. Unit will now turn on and stay on for few seconds.
- Direct the sensor toward the desired area to be scanned by adjusting the elbow joint and base joint on the sensor arm. Loosen screws before attempting to adjust sensor arms.

FIGURE 9





OPERATION

FIGURE 10



NOTE: Always tilt sensor unit head below horizontal for weather proofing

4. Have another person move across the centre of the area to be scanned and slowly adjust the "SENS" control toward maximum until the unit senses the presence of the moving person, causing the Floodlights to switch on.
5. Adjust time control to required setting.
6. To set the light level at which the Floodlight automatically switches "ON" at night, turn the "LUX" or light control . If the Floodlight is required to switch on earlier, e.g. dusk, simply wait for the desired light level, then slowly turn the "LUX" or light control towards  while someone walks across the centre of the area to be detected. When the Floodlight switches "ON" release the "LUX" or light control knob. You may need to make further adjustments to achieve your ideal light level setting.

MAINTENANCE

To avoid dust build-up and ensure proper functioning of the units, wipe the sensor lens lightly with a damp cloth every 3 months. Do not use solvents or abrasive cleaners on any part of your Floodlight.

REDUCING DETECTION AREA

To reduce the 180° wide-angle detection area, stick PVC electrical tape on the left, right or both sides of sensor lens. This will reduce 180° detection in extremities of area to be scanned. After adding PVC tape, further adjustment to sensor direction may be necessary.

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 Floodlight will now stay on continuously, just like a normal light. This override function can be selected during daytime or night time.

To return your Floodlight to the "Automatic" mode, switch your wall switch OFF for at least ten seconds, then switch it on again. To switch your Floodlight off completely, switch your wall switch OFF.

AUTOMATIC MODE

Turn your wall switch OFF for at least 10 seconds and then turn the wall switch back ON. At switch ON, the lights will come ON and if there is no movement go OFF again. After the time-out period set by the "TIME" control the Floodlight is in "Automatic" mode. The unit will then start sensing after dusk. The Floodlights will switch ON and automatically switch OFF after the pre-set time elapses and then only operate again when the heat movement is detected.

TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SUGGESTED REMEDY
Light does not switch ON when there is movement in the detection area.	1. No mains voltage.	Check all connections, and fuses/switches.
	2. Nearby lighting is too bright.	Redirect sensor or relocate unit.
	3. Controls set incorrectly.	Refer to section "Setting the controls".
	4. Sensor positioned in wrong direction.	Re-locate sensor.
Light switches ON for no apparent reason.	1. Heat sources such as aircon. vents, heater flues, barbecues, other outside lighting, moving cars are activating sensor.	Adjust sensitivity. Reduce detection area of lens using PVC tape.
	2. Animals/birds e.g. possums or domestic animals.	Probably unavoidable but redirecting sensor may help.
	3. Interference from on/off switching of electric fans or lights on the same circuit as your Sensor Floodlight. (This problem does not always occur but a faulty switch or noisy fluorescent light may cause the Sensor Floodlight 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 Floodlamp 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. Reflection from swimming pool or reflective surface.	Redirect or reduce sensitivity.
	5. Interference from power surges, mobile phones, CB's, Taxis, etc.	Try reducing sensitivity.
Light remains ON.	1. Wall switch is in override "ON" mode.	Switch light OFF for at least 10 seconds, then return to ON position.
	2. Time adjustment is set too long.	Reduce time by turning ON-TIME control anti-clockwise.
Lights switch ON during daylight hours.	Daylight sensor control is set to  position.	Turn light level control towards  position.
When setting controls in daylight the detection distance becomes shorter.	Interference by sunlight.	Re-test at night.

NOTE: All passive infrared detectors are more sensitive in cold weather than warm weather and more sensitive at night than daytime.