



FORTRESS II

Instruction Manual



15W SINGLE HEAD SECURITY LIGHT WITH PIR SENSOR

Model No.: MLXF3451MS / MLXF3451WS

Contents

01. **Warranty Page**
02. **General Information**
03. **Warnings**
04. **Parts List & Specifications**
05. **Installation Instructions**
06. **Motion Sensor Control Settings**
07. **Switching color temperature**
08. **Cleaning and Maintenance**
09. **Troubleshooting**
10. **Product Disposal**



15W SINGLE HEAD SECURITY LIGHT WITH PIR SENSOR

TO KEEP UP-TO-DATE WITH IMPORTANT PRODUCT INFORMATION

The product is guaranteed to be free from defects in workmanship and parts for a period of 2 years from the date of purchase. Defects that occur within this warranty period, under normal use and care, will be repaired, replaced or refunded at our discretion. The benefits conferred by this warranty are in addition to all rights and remedies in respect of the product that the consumer has under the Competition and Consumer Act 2010 and similar state and territory laws.

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.



YEAR WARRANTY

General Information

Congratulations on choosing to buy a Martec product.

All products brought to you by Martec are manufactured to the highest standards of performance and safety, and, as part of our philosophy of customer service and satisfaction, are backed by our warranty.

We hope you will enjoy using your purchase for many years to come.

THIS LED FLOODLIGHT SENSOR MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN, AND AN ELECTRICAL SAFETY CERTIFICATE MUST BE ISSUED ON COMPLETION OF THE INSTALLATION.

General Information and Safety Instructions

Before first using your new Floodlight with sensor, it is most important that you read and follow these instructions, even if you feel you are quite familiar with this product. Keep this document in a safe place for future reference.

This appliance **MUST** be installed by a Qualified Electrical Contractor in accordance with the local regulations, and all local, state and national electrical codes. Any alterations or additions to building wiring must be completed by a licensed electrician, or person authorised by legislation to work on the fixed wiring of any electrical installation.

All electrical work must only be undertaken after disconnection of the power by removing fuses or turning off the circuit breaker, to ensure all pole isolation of the electrical supply.

This is not a DIY product.

This is an outdoor domestic product and should not be used for commercial, trade or industrial purposes.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Application

This product is intended for outdoor use where the sensor lights are directed to an area to be lit.

Important Note

The important safeguards and instructions given in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution and care are factors which cannot be built into any product. The persons caring for and using the unit must supply these factors.

Compliance

AS/NZS 60598.2.1:2014 & AS/NZS 60598.1:2013 Luminaires – Particular requirements – Fixed general purpose luminaires.

AS/NZS 61347.2.11:2003 Lamp control gear - Particular requirements for miscellaneous electronic circuits used with luminaires.

IEC 82079-1 : 2012 Standards. Preparation of instructions for use – Structuring content and presentation - part1: general principles and detailed requirements.

AS/NZS CISPR 15: 2011 Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.

AS/NZS 62560:2014 Self-ballasted LED-lamps for general lighting services by voltage > 50 V – Safety specification.

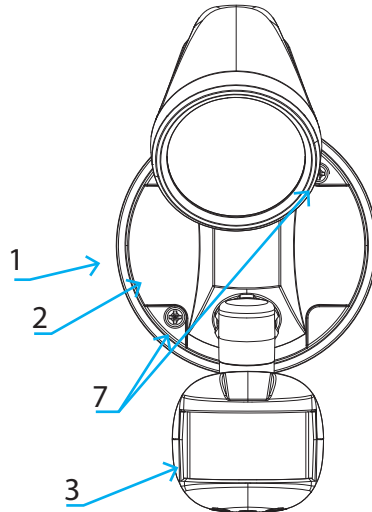
Warnings

- **Do not direct the heads upwards above horizontal.**
- **Always operate the sensor with sensor knobs facing downwards.**
- **Ensure wire connections are firm.**
- **This is an outdoor domestic product and should not be used for commercial, trade or industrial purposes.**
- **To avoid false activation, the sensor should be directed away from heat sources such as barbecues, flue vents, air-conditioners, another light fittings, moving objects, cars, etc.**
- **Keep it away from strong electromagnetic fields.**
- **Do not install on surfaces which can move or vibrate.**
- **Do not face it towards reflective surfaces such as glossy tiles, smooth white walls, swimming pools, etc.**
- **Do not immerse any part of the fitting into water or any liquid.**
- **The sensor light should be fixed approximately 2–2.5m above the ground, out of arms reach, preferably in a location under eaves where the unit is protected from the elements and shielded from direct sunlight.**
- **Do not look directly into the LED light.**
- **Do not attempt to perform modification or change parts within the light fixture.**
- **Dispose of packaging thoughtfully.**

Parts List & Specifications

Parts List

1. Wall mount base
2. Main body
3. Sensor lens
4. Sensor time control
5. Sensor sensitivity control
6. Sensor Lux control
7. Front screws
8. Wall mount screws



Specifications

Model No.: MLXF3451MS / MLXF3451WS

Material: Die cast + Glass + PC

Color: Black or white

Voltage: 220-240VAC~50/60Hz

LED: 1xCOB Chip; 3000K-5000K

Output lumen:

5000K - 1250lm;

4000K - 1250lm;

3000K - 1200lm;

With non-isolated driver; with CCT switch on the back

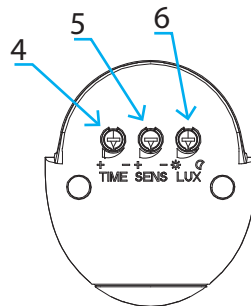
With PIR sensor

Detection angle: Max. 150°

Detection Distance: Max. 12m

Adjustable Time: 10±5 seconds to 4±1 minutes adjustable

LUX: From daylight to night adjustable



8



Installation Instructions

Introduction

- **Do not direct the heads upwards above horizontal.**
- **Always operate the sensor with sensor knobs facing downwards.**

The security light with sensor continuously scans the detection area and switches the light 'ON' when it detects movement.

This means that whenever movement is detected within the range of the sensor the light will be switched 'ON' automatically to illuminate pathways, steps, patios, porches, backyards or areas around the home. While there is movement within the detection range the light will stay 'ON'.

The security light with sensor is designed for outdoor use in normal, clean conditions.

BEFORE COMMENCING INSTALLATION

For the best performance we suggest you take into account the following:

Do not face sensor towards direct sunlight.

The detection efficiency is substantially lower when the movement is directly towards or away from the sensor. Best performance is achieved when the movement is across the detection area of the sensor.

To avoid flickering and/or interference with other electronic/electrical equipment it is suggested to wire the security light into its own circuit with its own switch.

The recommended mounting height is 2 to 2.5 metres.

To avoid false activation, the sensor should be directed away from heat sources such as barbecues, flue vents, air-conditioners, other light fittings, moving objects, cars etc.

Keep the security light away from strong electromagnetic fields.

Do not install on surfaces which can move or vibrate.

Do not face sensor towards reflective surfaces such as tiles, smooth white walls, swimming pools, etc.

The sensor range is approximately 12m by 150°. This may vary slightly depending on the mounting height and the temperature.

Always ensure the LED light heads don't touch the sensor. The heat generated by the heads may be harmful to the sensor over a period of time. It is recommended to keep a minimum gap of about **30mm** between the heads and the sensor.

Product Installation

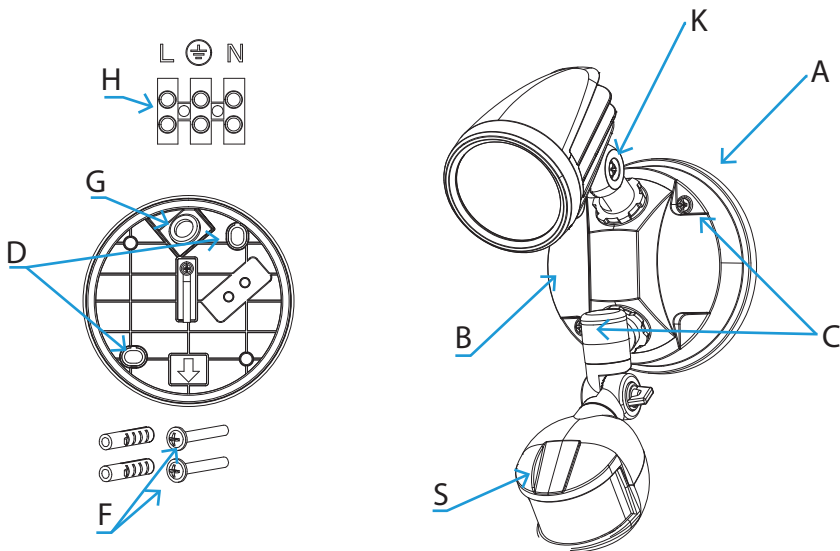
NOTE: This product must be installed by a licensed electrician.

NOTE: For best performance install at a height between 2 and 2.5 metres.

1. Ensure the Mains Supply is switched 'OFF'.
2. Unpack the fixture carefully and dispose of the packaging material thoughtfully. The fitting must be wired to its own wall switch.
3. Remove the mounting plate 'A' from light body 'B' by unscrewing the front screws 'C'.
4. Drill two holes in the wall using the mounting holes 'D' on the mounting plate 'A' as a template.
Note: exercise caution to avoid drilling into existing electrical wiring.
5. Feed mains supply cable through the wall and weatherproof holes as appropriate. Pierce the rubber grommet 'G' with a screwdriver and pass the mains supply cable through.
6. Use screws and suitable fixture system 'F' to secure the mounting plate 'A' to the wall securely.
7. Connect the Live (L), Neutral (N) & Earth (E) according to the markings on the terminal block 'H'.
8. Refit the light body 'B' to the mounting plate 'A', securing it in place using two screws 'C' removed earlier. Tighten them firmly to maintain IP rating.
9. Apply silicone if required around the base plate and grommet 'G' to maintain IP rating.
10. Loosen the Screw in knuckle 'K' and angle the light head into desired direction, then re-tighten the Screw firmly. Note that sensor dials on the sensor 'S' must always face downwards. Light heads should not be faced above the horizontal.
11. Reconnect the mains supply.
12. Turn on the security light.

• **Do not direct the heads upwards above horizontal.**

• **Always operate the sensor with sensor knobs facing downwards.**

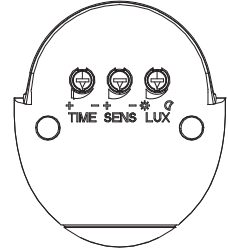


Motion Sensor Settings

The PIR motion sensor has three adjusting knobs: **SENSITIVITY, TIME** and **LUX**.

SENS (Sensitivity Adjustment)

- The sensitivity can be increased by turning the knob towards (+) and decreased by turning the knob towards (-).
- **Note:** The sensitivity is affected by environmental factors such as temperature. The sensor is more sensitive at lower environmental temperatures and vice versa.



TIME

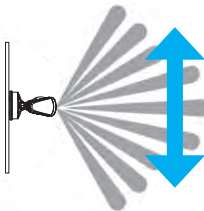
- The time duration is adjustable from. Turn this knob towards (+) to increase the time, or turn it towards (-) to decrease the time.
- Note: Once the light is activated by the PIR sensor, any subsequent detection will restart the time again from the beginning.
- The light will stay 'ON' until the duration of the time set by this knob has expired.

LUX (Lux Control Adjustment)

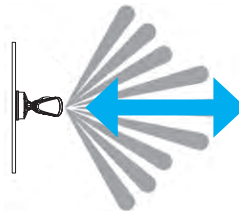
- The LUX control has a built-in photocell that detects daylight and darkness .
- ☀ – Turning the LUX knob into this position means that the PIR sensor will turn the light ON at 'Daytime' (as well as at night time).
- ☾ – Turning the LUX knob into this position means that the PIR sensor will turn the light ON only at 'Night'.
- Desired LUX level can be set by adjusting the LUX knob between the 'Daytime' and 'Night'.

WALK THROUGH TEST

- Set the TIME knob to min (-) the LUX level to (☀) and SENS knob to (+) position and wait approximately a minute for the control circuit to stabilise. Do not stand within the sensing range of the sensor!
- Direct the sensor towards detection area by adjusting the swivel joint on the sensor arm.
- NOTE: Do not use excessive force. Loosen the wing nut first on the knuckle of the sensor before making adjustment.
- Walk slowly across the detection area. The sensor will detect the infrared radiation of the human body and turn the light ON.
- Test the coverage of the area by walking further away from the sensor until you get satisfactory result. Adjust the direction of the sensor left or right or up or down if required.
- Once you are happy with the direction, don't forget to set the TIME and re-adjust the SENSITIVITY and LUX level required from day (☀) to night (☾) operation.



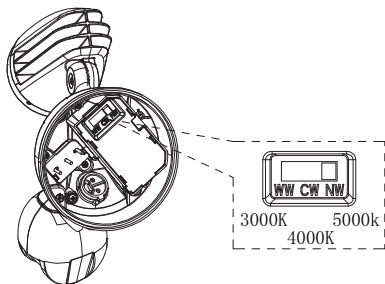
Good sensitivity walking across the detection area.



Poor sensitivity walking towards or away from the sensor.

Switching color temperature

- On the back of the LED light body, there is CCT switch which allows you to switch the color temperature of the light among 3000K (WW), 4000K(CW), 5000K(NW).
- Each time you when want to switch the color temperatures please remember to turn off the mains supply first, and then take down the light body. (Refer to installation instructions).



MANUAL OVERRIDE

When the power is turned ON the fitting operates in AUTO mode. In this mode the sensor turns the light ON and OFF automatically.

SETTING THE FITTING INTO 'MANUAL MODE'

- The MANUAL OVERRIDE function means that the fitting can be put permanently 'ON'. In this mode the PIR sensor is disabled.
- To set the fitting into 'MANUAL MODE', the fitting must be in AUTO MODE. Turn the wall switch **OFF** then turn it back **ON** twice within 3 seconds.

Wall switch action: OFF $\xrightarrow{2 \text{ times}}$ ON

- The lights will turn 'ON' permanently and the fitting will be in MANUAL MODE.

IMPORTANT NOTE: If the wall switch action is done too fast (e.g within 1 second) or too slow (e.g 3 second +) the fitting may not enter into MANUAL MODE.

SETTING THE FITTING BACK INTO 'AUTO MODE'

- To change back to AUTO MODE, turn the power OFF then turn it back **ON** again twice within 3 seconds.

Wall switch action: OFF $\xrightarrow{2 \text{ times}}$ ON

- The PIR sensor now will enter into AUTO MODE. The light will stay **ON** for the period of TIME pre-set on the sensor, and it will turn **OFF** after expire of that time.
- The Sensor now is in **AUTO** mode and ready for operation.

Cleaning and Maintenance

Ensure light is turned off and cool before cleaning.

To avoid dust build-up on the sensor for proper functioning of the fitting, please wipe the sensor lens with a soft cloth approximately every 3 months.

Do not use chemicals.

Troubleshooting

PROBLEM	POSSIBLE CAUSE	SUGGESTED SOLUTION
Light does not switch ON when movement is present in detection area.	1. NO mains power.	Check connections, fuses and switches.
	2. Sensor positioned in wrong direction.	Readjust/redirect the sensor.
	3. Nearby lighting is too bright.	Redirect sensor or relocate the unit.
	4. Controls set incorrectly.	Readjust sensor controls or readjust angle.
Light turns ON by itself for no apparent reason (false triggering) or light flickers.	1. Heat from lamp heads activates the sensor.	Adjust PIR sensor or floodlight to allow a minimum gap of 30mm between floodlight body and sensor head.
	2. Heat sources such as aircon's vents, heater flues, barbecues, other outside lighting, or moving cars are activating sensor.	Adjust direction of sensor away from these sources.
	3. Animals/birds e.g. possums or domestic animals.	Redirect sensor may help. Relocate the fitting. Adjust sensitivity to minimum.
	4. Interference from and/or switching On/Off other electronic/electrical appliances, electric fans, LED or fluorescent lights installed on the same circuit with security light. For example, faulty switch or noisy fluorescent light may cause the security light to switch ON.	<ol style="list-style-type: none"> 1. Replace faulty switch/appliance causing the interference. 2. Replace noisy fluorescent tubes and/or starters or electronic ballasts in those faulty fittings. 3. Separate the security light from the circuit in which these appliances are connected and wire it into it's own circuit.
	5. Reflection from swimming pool, or other reflective surfaces.	Redirect sensor.
Light remains ON.	1. Continuously false triggering.	Redirecting sensor head may help.
	2. Light stayed in Manual Mode.	Set fitting back into AUTO Mode.
	3. Time is set too long.	Reduce time.
Light turns ON during daylight.	LUX control knob is set to daylight position.	Turn the LUX control knob to desired light level setting.
When setting LUX controls in daylight the detection distance becomes shorter.	Interference by sunlight.	<ol style="list-style-type: none"> 1. Re-test at night. 2. Relocate the fitting so the sun won't shine directly into the sensor.

NOTE: All Passive Infra-Red detectors are more sensitive in cold and dry weather than warm and humid weather.

Made in China

Product Disposal

Please dispose of this product thoughtfully once it has passed its useful life. At the end of their working life, do not throw the appliance out with your household rubbish. Electrical and electronic products contain substances that can have a detrimental effect on the environment and human health if disposed of inappropriately. Observe any local regulations regarding the disposal of electrical consumer goods and dispose of it appropriately for recycling. Contact your local authorities for advice on recycling facilities in your area.

Martec Australia Pty Ltd
Email: sales@martecld.com.au
Contact Phone: 02 8778 7500
Contact Fax: 02 8778 7555

Company Address:
6 Austool Place
Ingleburn NSW 1890

Opening Hours:
Monday to Friday
Warehouse hours: 7.30am – 3.30pm
Office hours: 8.00am – 5.00pm EST

WWW.MARTECAUSTRALIA.COM.AU

(For Warranty Conditions please refer to the Martec Warranty Terms and Conditions)

MARTEC WARRANTY FORM

Customer Details

Surname..... Given Name.....

Address.....

Daytime Ph..... A/h Ph.....

Email.....

Warranty Details

Date of Purchase..... Installation Date.....

Product Description.....

Store..... P.O. No.....

Fault Description.....

.....

.....

.....

I, the Customer, hereby acknowledge that I have read and agree with the Martec Pty Ltd warranty statement and the conditions found within regarding the warranty service and its limitations.

I, the Customer, acknowledge that Martec Pty Ltd reserves the right to charge me, labour and material cost of any replacement parts or products if required, in addition to the costs associated with shipping these parts to my location should the reported fault not be an actual manufacturing fault or malfunction. This will be assessed on a case by case basis by the authorised Martec Service Agent dispatched to my premises. The current minimum charge will be \$190+GST.

I, the Customer, acknowledge that I will be liable for this charge should the authorised Martec Service Agent determine this to be the case. Failure to pay warranty recovery charges issued by Martec Pty Ltd will result in the termination of any remaining warranty, in addition to possible debt collection procedures.

I,, do hereby certify that I have read and comply with the aforementioned warranty conditions and agree to the conditions of this warranty claim.

Print Name:.....

Signature:.....

Date:.....

