# 500W PIR HALOGEN FLOODLIGHT

**Cat No. NSLB500C - Black  Cat No. NSLW500C - White**

# 150W PIR HALOGEN FLOODLIGHT

**Cat No. NSLB150C - Black  Cat No. NSLW150C - White**

Installation & Operating Instructions

TIMEGUARD LIMITED

INSTALLATION & OPERATING INSTRUCTIONS

**NSLB500C/NSLW500C**

**500W PIR HALOGEN FLOODLIGHT**


3 Year Guarantee

In the unlikely event of this product becoming faulty due to defective material or manufacture, within 1 year of the date of purchase, please return it to your supplier with proof of purchase and it will be replaced free of charge. In the second and third years or any difficulty in the first please contact our helpline on 020 8450 0515.

**NSLB150C/NSLW150C**

**150W PIR HALOGEN FLOODLIGHT**


3 Year Guarantee

In the unlikely event of this product becoming faulty due to defective material or manufacture, within 1 year of the date of purchase, please return it to your supplier with proof of purchase and it will be replaced free of charge. In the second and third years or any difficulty in the first please contact our helpline on 020 8450 0515.

## SECTION ONE
## GENERAL INFORMATION

The unit utilises passive infrared technology to detect heat radiation of moving human bodies. Upon detection, the lamp will illuminate for a user-determined time period.
An integral daylight sensor ensures night-only operation if required.

**PARTS INCLUDED**
- Luminaire c/w PIR Sensor unit.
- Instruction manual. Please keep safe for future reference.
- Accessory Pack.
- Tungsten halogen bulb.

**TOOLS & PARTS NEEDED**
- Electric/hand-held drill & bits.
- Terminal or Electricians screwdriver.
- Large slotted/philips screwdriver.
- Wire cutters.

Unit is for outdoor use only. Unit must be mounted on a non-flammable surface as a fixed luminaire, and is not suitable for portable use.
The unit can get very hot during use. Ensure the unit has cooled before handling.
Ensure adequate ventilation space is allowed between the unit and any object above, in front or to either side of the unit. Suggested space is 0.5m above, 0.3m to either side & 1.0m in front.
If in any doubt, consult a qualified tradesperson or electrician.

## SECTION TWO
## SELECTING THE LOCATION

The motion detector has a number of detection zones, at various vertical and horizontal angles as shown (see diagram A).
A moving human body needs to cross/enter one of these zones to activate the sensor. The best all-round coverage is achieved with the unit mounted at the optimum height of 2.5m. If the unit is mounted any higher than this, the sensor will need to be angled down slightly to maintain coverage and forward coverage will be reduced.

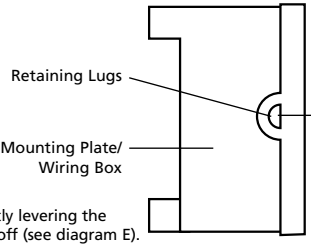
Careful positioning of the sensor will be required to ensure optimum performance.
See diagram A detailing detection range and direction.

The sensor is more sensitive to movement ACROSS its field of vision than to movement directly TOWARDS it (see diagram B). Therefore position the unit so that the sensor looks ACROSS the likely approach path.
Avoid positioning the sensor where there are any sources of heat in the detection area (extractor fans, tumble dryer exhausts etc.).
Reflective surfaces (ie pools of water or white-painted walls) and overhanging branches may cause false activation under extreme conditions.

During extreme weather conditions the motion sensor may exhibit unusual behaviour. This does not indicate a fault with the sensor. Once normal weather conditions return, the sensor will resume normal operation.

## SECTION THREE
## INSTALLATION

**E**




After choosing a suitable location (see previous section) install the unit as follows:

Remove the wiring box cover by gently levering the side retaining lugs outwards and lift off (see diagram E).

The unit is suitable for connection to a 230 V ac 50Hz electricity supply. It is suggested that 3-core round flexible cable of 1mm$^2$ gauge is used. An isolating switch should be installed to switch the power to the unit ON & OFF. This allows the sensor to be easily switched off when not required or for maintenance purposes or to override the unit electrinically (by switching the supply off and on within 1 second).

Unfasten the screw on the top of the floodlight. Install the halogen bulb, making sure not to touch the bulb with bare hands. It is suggested that the bulb is handled using a clean dry cloth or tissue.

Ensure the bulb is correctly fitted in the lampholder before use.

Re-attach the front cover, do not overtighten the fixing screw.

Remove the bracket from the floodlight.

Mark the position of the bracket fxing holes on the wall.

Drill the holes. Insert the wall plugs into the holes and fix the bracket to the wall.

***** IMPORTANT *****
**Switch off the electricity at the fuse box by removing the relevant fuse or switching off the circuit breaker before proceeding with the installation.**

**CONNECTION**
PIERCE & PASS THE CABLE THROUGH THE GROMMET BEFORE PROCEEDING.

Connect the cable to the terminal block on the unit as follows (see connection diagram):

| | |
|---|---|
| NEUTRAL (Blue) | N |
| EARTH (Green/Yellow) | ⏚ |
| LIVE (Brown) | L |

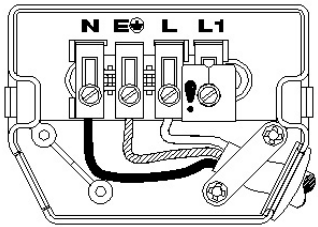
Ensure that the connections are secure.

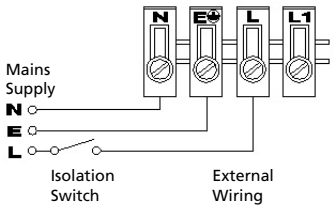
For details of override connections, please see later sections.

Secure the cable using the cord grip provided.

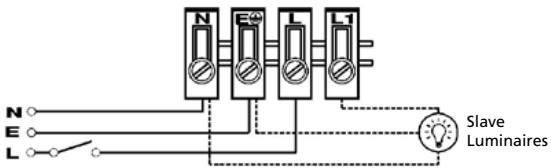
Line up the wiring box cover with the wiring box and press home ensuring that the retaining lugs on each side of the cover engage fully with the catches on the wiring box to achieve a weatherproof seal (see diagram E).

Fix the floodlight to the bracket.




The diagram below also shows the required connections for the addition of slave luminaires. When adding slaves, be sure not to exceed the maximum switchable load (see Technical Specifications).



## SECTION FOUR
## COMMISSIONING AND OPERATION

**WALK TEST PROCEDURE**
The sensor will rotate from left to right, and tilt forward or backward. Adjust the sensor to point in the required direction and angle down to limit forward range as required.

**The unit can be set up in daylight or at night.**
Set the time adjustment to minimum(fully anti-clockwise) and the light threshold to maximum (fully clockwise) see diagram C.
Turn the power to the unit on. The lamp will illuminate for approximately 30 seconds. This indicates the unit is wired correctly.
The unit is in Test Mode when the light turns off.

**TEST MODE**
The lamp will now illuminate for approximately 5 seconds every time movement is detected. Walk across the detection area approximately 5 metres from the unit (see diagram B). Each time you are detected the lamp will illuminate. Now stand still until the lamp extinguishes (this should take approx. 5 seconds) and then for a further 2 seconds.
Start moving again, when you are detected again, the lamp will illuminate.
Repeat the above, walking at various angles and distances to the unit. This will help you to establish the detection pattern.

If the detection area is too small for your requirements, try angling the sensor head up. This will increase the detection area. Angling the head downwards will reduce the detection area should a smaller coverage be required.

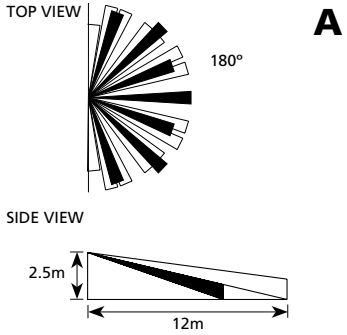
**SETTING UP FOR AUTOMATIC OPERATION**
When walk tests are complete, the unit can be set up for Automatic Mode.

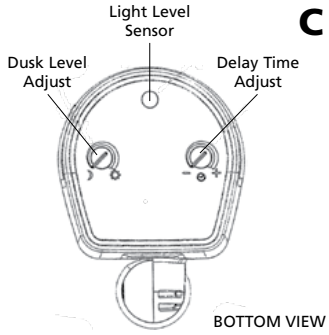
The TIME setting controls how long the unit remains illuminated following activation and after all motion ceases. (See diagram C, the time adjustment knob is indicated by the "Clock" symbol).
The minimum time (fully anti-clockwise) is approx. 5 seconds, whilst the maximum time (fully clockwise) is approx. 5 minutes. Set the control to the desired setting between these limits.

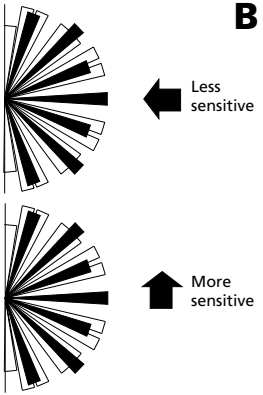
The DUSK control determines the level of darkness required for the unit to start operating. (See diagram C). The DUSK adjustment knob is indicated by the "Moon" and "Sun" symbols).

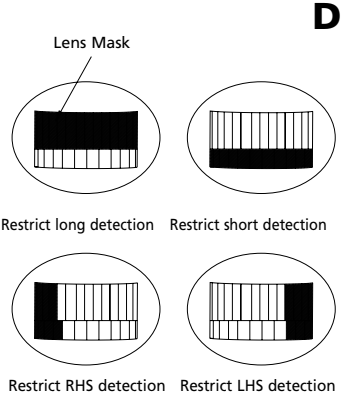
Set the light threshold to maximum (fully clockwise/Sun end), then turn the control anti-clockwise about three quarters of the way round to the Moon end. This will give operation after DUSK approximately.

For a more accurate setting of the DUSK control turn it fully anti-clockwise (Moon end) and leave for at least 20 seconds for the unit to settle.
When the ambient light level reaches that required for DUSK adjust the DUSK control a small amount clockwise pausing to try to get the unit to detect and turn the lights under control ON by moving a hand slowly backwards and forwards across the front of the detector lens for around 5 seconds.
Continue to turn the control small amounts in a clockwise direction, stopping after each adjustment to try to get the unit to detect as above.
Eventually detection will occur and the DUSK level is now set as required.




**MASKING THE SENSOR LENS**

To restrict the sensor coverage, preventing detection in unwanted areas, mask the sensor lens using the masking label provided (see diagram D). The top section of the lens covers long range detection, the bottom covers short range. Similarly the left and right lens sections cover the left and right detection areas respectively.

**MANUAL OVERRIDE MODE**

The light can be switched on for longer time periods by use of the Manual Override Mode. This can be activated at night by using the internal wall switch or circuit breaker.

Switch the internal wall switch/circuit breaker once (off/on) within one second. The unit will now illuminate continuously until dawn or until switched back into Auto Mode.
To switch the unit back into Auto Mode, switch the internal wall switch/circuit breaker once (off/on) within one second. The unit will return to its Auto mode and will operate as set up after the walk test procedure.

## SECTION SIX
## TROUBLESHOOTING GUIDE

| PROBLEM | SOLUTION |
|---|---|
| ❑ Lamp stays ON all the time night and day. | Check wiring connections. Wires to L and L1 terminals may be transposed. |
| ❑ Lamp stays ON all the time at night, or PIR keeps activating at random for no apparrent reason. | The unit may be suffering from false activation. Cover the sensor lens completely with black pvc tape. This will prevent the sensor from "seeing" anything. If the unit now switches off after the set time duration and does not re-activate, this indicates that the problem was caused by false activation. The problem may be solved by slightly adjusting the direction/ angle of the sensor head (see previous section). If however, the unit continues to remain ON or to operate randomly the unit is faulty and should be replaced. |
| ❑ PIR keeps activating for no reason / at random. | You may not be allowing the unit time to complete it's warm-up period. Stand well out of the detection range and wait (the warm-up period should never exceed 5 minutes). Occasionally, winds may activate the sensor. Sometimes passages between buildings etc. can cause a "wind tunnel" effect.<br>Ensure the unit is not positioned so as to allow detection of cars/people using public thoroughfares adjacent to your property.<br>Ensure that the unit is mounted securely, even the slightest movement can result in a false detection. |
| ❑ PIR sensor will not operate at all. | Check that the power is switched ON at the circuit breaker/ internal wall switch.<br><br>Turn OFF the power to the unit and check the wiring connections as per the diagram (see previous section 3). Ensure no connections are loose.<br><br>Check the bulb. If the bulb has failed, replace (do not hold bulb directly with fingers, use a tissue or clean dry cloth). Ensure that the bulb is seated correctly in the bulbholder. |
| ❑ The PIR sensor will not operate at night. | Refer to section 4 for DUSK control adjustment. |
| ❑ Unit activates during the daytime. | Refer to section 4 for DUSK control adjustment. |
| ❑ PIR coverage is poor/sporadic. | Unit may be poorly located. See previous section - 'Selecting The Location' and re-locate the unit. |
| ❑ Detection range varies from day to day. | PIR sensors are influenced by climatic conditions. The colder the ambient temperature, the more effective the sensor will be. You may need to make seasonal adjustments to the sensor head position to ensure trouble-free operation all year round. |

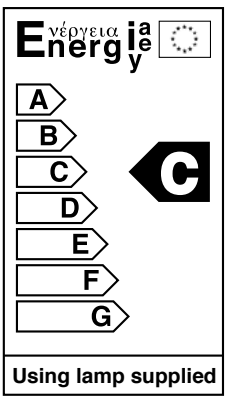
## SECTION FIVE
## TECHNICAL SPECIFICATIONS

| | |
|---|---|
| **Detection Range** | **Up to 12 metres** |
| **Detection Angle** | **180°** |
| **Power Supply** | **230 V AC ~ 50Hz** |
| **Maximum External Load** | **NSLB/W150C 2150W Halogen/Incandescent<br>375W any fluorescent system (including LE)<br>NSLB/W500C 1800W Halogen/Incandescent<br>375W any fluorescent system (including LE)** |
| **Fitted Lamp Type** | **NSLB/W150C 230V Linear Tungsten Halogen 100W type C max (R7S cap)*<br>NSLB/W500C 230V Linear Tungsten Halogen 400W type C max (R7S cap)**** |
| **Time On Adjustment** | **5 seconds - 5 minutes** |
| **Dusk Level Adjustment** | **Day & night or night only operation** |
| **Environmental Protection** | **IP55 (suitable for outdoor use)** |
| **EC Directives** | **CONFORMS TO 73/23/EEC, 89/336/EEC** |

**In the event of the cover glass shattering, do not replace with normal household glass. Contact the helpline for replacement details.**

*The lamp supplied is a class C (high efficiency) unit of 100W power consumption giving a similar light output to the lower efficiency 150W units previously in use.

**The lamp supplied is a class C (high efficiency) unit of 400W power consumption giving a similar light output to the lower efficiency 500W units previously in use.




**If you experience problems refer to Troubleshooting Guide. If problems still exist, do not immediately return the unit to store.**

**Telephone the Timeguard Customer Helpline**

**020 8450 0515**

**Qualified Customer Support Co-ordinators will be on-line to assist in resolving your query.**

For assistance with the product please contact:-

# HELPLINE
# 020-8450-0515

or email helpline@timeguard.com

TIMEGUARD
LIMITED

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