

SOLAR MOTION SENSOR SECURITY LIGHT

Instruction Manual

Model 5500

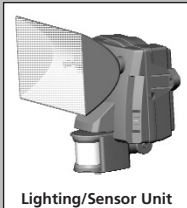
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Solar Panel Unit



Lighting/Sensor Unit

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These instructions relate ONLY to this Solar Motion Sensor Set and contain important information for using the product for the first time. Please keep these instructions for later reference. They should always accompany the product in the event of transfer to a new user.

1. INTRODUCTION

Thank you for purchasing this Solar Motion Sensor Security Light. You have purchased a product that complies with the latest and most up-to-date solar technology available.

This product complies with the European and National Standards. The relevant certificates of conformity are held by STI Group.

To preserve these standards and in order to maintain safety you should adhere to the instructions for use detailed in this manual.

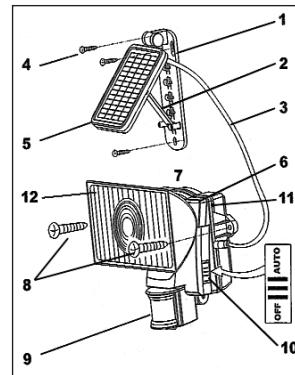
2. SECURITY INSTRUCTIONS

In the event of any problems arising or damage occurring as a result of misuse the manufacturers warranty will be deemed cancelled. The manufacturer is not responsible for any claims or damages arising from the misuse of this product. For safety reasons and in order to maintain standards (CE) you are prohibited from altering or changing any component in this Solar Motion Sensor Security Light.

Please follow the instructions very carefully.

For commercial applications due care and attention must be paid to the Health and Safety Standards in your jurisdiction.

3. COMPONENTS



1. Mounting Bracket
2. Adjustment Support
3. Power Cable
4. Solar Cell Mounting Screws (x3)
5. Solar Cell
6. Main Battery Unit
7. Main Unit
8. Mounting Screws (x2)
9. PIR Sensor
10. AUTO / OFF Switch
11. AC-DC Adaptor Interface (requires 9VDC/500mA output adaptor (not included))
12. Transparent Light Cover

4. MOUNTING INSTRUCTIONS

HOW TO DETERMINE WHERE TO MOUNT YOUR SOLAR MOTION SENSOR SECURITY LIGHT

Note: In the FIGURE B position, it is important not to let rain enter the main unit. Make sure it is mounted in a covered area. Please note that: **DIRECT SUNLIGHT** is important for the operation of SOLAR MOTION SENSOR SECURITY LIGHT. The more direct sunlight the solar cell receives in daytime, the longer the light will operate. (Else, you have to charge it through the Adaptor hole on the main body's side)

Main Unit: The main unit contains the lamp (**10Watt/6V G5.3 halogen bulb**), motion sensor and battery (**sealed Lead-Acid Rechargeable battery, 6V, 4Ah**). When determining where to mount this unit, consider that the motion sensor has a detection scope of around 39 feet (in front of the light) to 26 feet (around the light). See FIGURE C on the next page. Sensor has a horizontal field of vision of 180°. To mount the unit vertically as a security light, attach the unit to a solid surface as shown in FIGURE A. To mount the unit horizontally as convenience lighting, attach the unit as shown in FIGURE B. Use the two wood/ sheet metal screws provided in the package.

Solar Cell: The solar cell is the main power source for the SOLAR MOTION SENSOR SECURITY LIGHT. It converts the sunlight's energy into electricity that charges the battery in main unit. It requires **DIRECT SUNLIGHT** onto the surface of solar cell for as long as possible during the daytime.

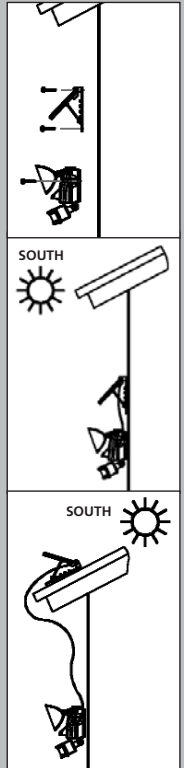


Figure A

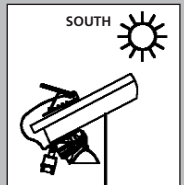


Figure B

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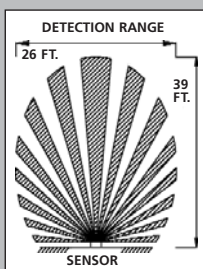


Figure C

Use the three wood/sheet metal screws provided in the package (#4 on parts list) to mount the solar cell unit onto a solid surface. Make sure it is mounted fixed into the solid surface.

You can adjust the angle of the solar cell by moving the adjustment bracket to the appropriate hook on the mounting base. It should face as much DIRECT SUNLIGHT as possible during the daytime.

At last route the solar cell's power cord to the main unit and plug it into the side hole for solar cell. Additionally, the side hole for adaptor is for the secondary charging during raining season.

Important: if the main unit is mounted horizontally, it must be mounted in a covered area so rain water can not get into the unit through the exposed vents.

5. INITIAL CHARGING SET-UP

After you successfully installed your SOLAR MOTION SENSOR SECURITY LIGHT, you are almost ready for carefree operation with a few final steps:

Initial 3-days Charge:

On the main unit there is a slide switch with 2 positions:

- OFF • AUTO

AUTO - Position for normal operation

OFF - Position for delivery or long periods of non-use
Position for initial 3-day charge before first use.

Then, turn the slide switch to OFF position. The solar cell will charge the battery without activating the unit. Leave the switch in this position for 3 sunny days to ensure that the battery has a full charge for motion sensor adjustment and normal operation.

6. UNDERSTANDING THE MOTION SENSOR CONTROLS

After the initial 3-day charge, turn the switch to AUTO position.

In the motion sensor the following 3 specifics **TIME / SENS / LUX** are pre-set in factory.

TIME - Duration time of the light to run after motion is detected in the field, the duration time is set to 30 seconds. On a fully charged battery, it can light up to 300 illuminations of 30 seconds each. Note: Once the light is activated by the PIR sensor, any subsequent detection will restart the timed period again from the beginning.

SENS - The infra-red sensor's detection range is preset to detect movement from 26 to 39 feet away. This can be affected by environmental temperature. The lower environmental temperature and humidity, the more sensitive the PIR sensor. Refer to FIGURE C for detection range.

LUX - The Lux control module has a built-in sensing device (photo cell) that detects daylight and darkness. The control level is pre-set to 30 LUX, which denotes the dawn or dusk environmental level. When the environment is darker than 30 LUX, the sensor will start to work.

Walking test:

Point the motion sensor to facing the area you want to detect motion in. Walking slowly in its detection area when it is evening or when the environment is dark, the built-in infra-red sensor detects movement by measuring the radiation given off by the human body and then turns on the light. Test the coverage of the area by walking around slowly until the light does not switch on.

7. ADJUSTING LAMP HOUSING

Point the lamp housing facing the area you wish to illuminate.

8. REPLACING BULB & BATTERY

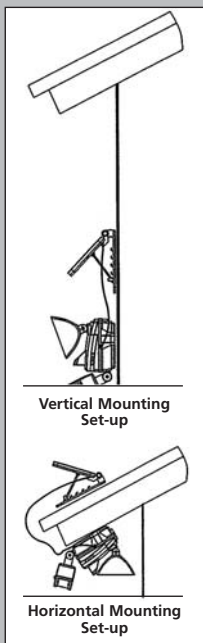
Caution: When replacing the bulb or battery, the slide switch on the main unit must be in the OFF position.

Bulb Replacement: Depending on the amount of use, the bulb in your SOLAR MOTION SENSOR SECURITY LIGHT is designed to have an average life of about one year. When it becomes necessary to replace the bulb, you can obtain a replacement from location agent. The old bulb can be easily replaced by popping the transparent light cover (#8 in parts list) off with a screwdriver (there is a slot at one end of the cover) and pulling the bulb from its base. Reverse this procedure with the new bulb to reassemble.

IMPORTANT: The bulb will be hot when the light is on, please let the bulb cool when replacing the bulb. Be extremely careful when handling the bulb, especially if it is broken. Also, do not touch the bulb with bare hands / fingers as this will shorten bulb life.)

Battery Replacement:

The battery in your SOLAR MOTION SENSOR SECURITY LIGHT is designed to last for about 3 years. When it becomes necessary to replace the battery, you can obtain a replacement from your local distributor or STI Group.



Slide Switch



AC-DC Adaptor Interface.
Requires 9VDC/500mA
output adaptor
(not included).

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The old battery can be replaced by first removing the unit from its mounting surface. Then remove the screws on the back of the main unit which hold the halves together. Carefully unplug the positive and negative battery leads and unscrew the screws holding the battery retainer in place. Carefully remove the battery from its compartment and replace by reversing this procedure.

Caution: Make sure the (+) and (-) leads are attached correctly to the appropriate (+) and (-) battery terminals. Serious damage to the unit may result if they are connected backwards.

It is important to dispose of the battery in an environmentally conscious manner. Dispose of according to applicable governmental regulations. Recyclable.

9. GENERAL ELECTRICAL AND SAFETY WARNINGS

- 1) The AUTO/OFF switch on the main unit must be in the OFF position when changing the bulb or the battery.
- 2) Do not cut the solar cell wire. Discontinue use if the wire becomes frayed or broken.
- 3) Do not immerse components in liquid.
- 4) Do not use any other charge than the single solar charging panel provided with the SOLAR MOTION SENSOR SECURITY LIGHT. This may result in injury or damage to the light and voids any warranty.
- 5) Position so that the cord is securely fastened and will not result in a hazard (such as tripping).
- 6) When changing the bulb or battery, be careful of any sharp edges that could cut you or the wires. Do not pull on wires.

10. CLEANING

It is important that the solar panel is kept free of dirt and debris. A dirty solar panel will not allow the battery to fully charge and this will shorten the life of battery and cause the light to malfunction.

11. STORAGE

If you wish to store your light indoors for more than two or three days, follow these steps to prevent damage to battery:

- 1) Turn the switch to OFF position
- 2) Store the light and solar panel where it can receive some sunlight or room light each day. The battery needs light to maintain a charge during storage
- 3) During prolonged storage, unit must be fully charge once every four months, for best performance, do not store for prolonged periods.

12. TROUBLESHOOTING

Light does not switch on in darkness.

- Check whether the switch is on AUTO position.
- Check the motion sensor is positioned to detect movement.
- Check the solar module is correctly angled to pick-up enough sun.
- Check the bulb is not broken or out of its socket.
- Low battery - charge for 3 sunny days with switch in OFF position.
- Replace the bulb.

Light is not as bright as normal.

- Low battery - charge for 3 sunny days with switch in OFF position.
- Replace the bulb.

13. TECHNICAL DATA

Operation voltage:	6 Volt /4 Amp Hour
Solar module:	1.3 watts. 4.75" x 4.75" panel
Light source:	10 Watt/ 6V G5.3 Halogen Lamp
Battery pack:	6V, 4AH Sealed Lead-Acid Rechargeable Battery
Battery operation capacity:	Up to 300 illuminations at 30 sec.

14. SPARE PARTS

Solar panel: Item No. SP5500

Halogen light: Item No. HL5500

Battery pack: Item No. BP5500

15. ONE YEAR LIMITED WARRANTY

Please register your product within 7 days at:
www.stigroupinc.com/registration

If within 12 months from the date of purchase this product fails due to a defect in material or workmanship. STI Group will replace or repair it free of charge. You will need to provide proof of purchase and you may be required to send in the solar power station to the STI Group repair center for warranty.

The warranty does not apply to:

Damage caused by accidents, abuse, poor handling, or normal wear and tear. Products which have been subject to unauthorized repair or modification. Batteries are a normal wear item and need to be replaced periodically. For further information please contact your nearest service centre detailed on the last page of this instruction manual.