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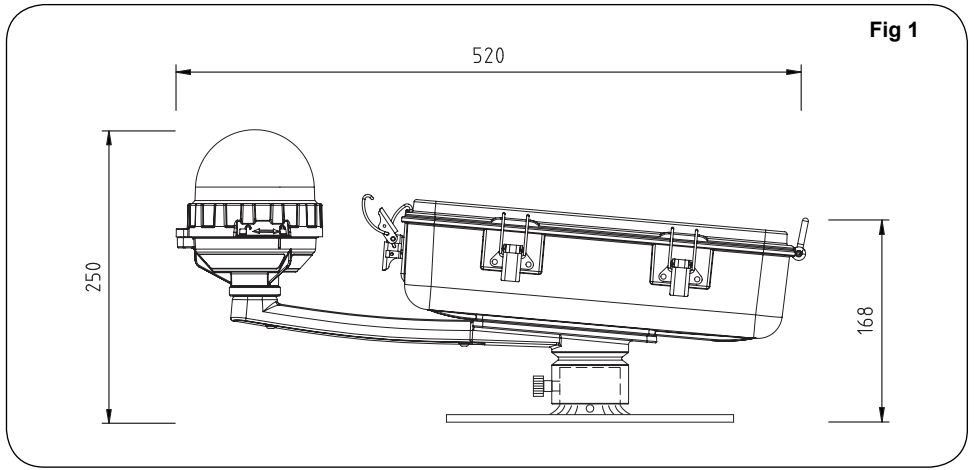
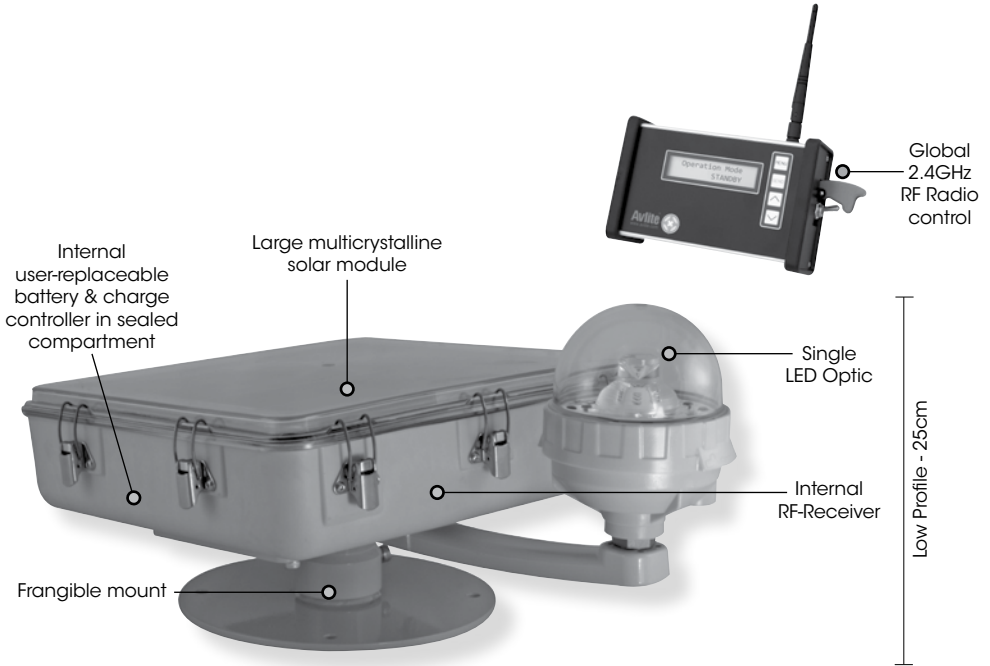
# AV-HL-RF-SOL

Radio Controlled Solar Heliport Light  
Installation & Service Manual

Version 2.0

# AV-HL-RF-SOL

## Radio Controlled Solar Heliport Light



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Version No.	Description	Date	Approved
1.0	Manual Launch	August 2012	S. Turner
1.1	New images	January 2013	J. Dore
1.0	External battery charging port	March 2013	A. Groell



## Introduction

**Congratulations! By choosing to purchase an Avlite light, you have become the owner of one of the most advanced solar LED airfield lights in the world.**

Avlite Systems draws on more than 25 years experience in the design and manufacture of navigation aids, and particular care has been taken to ensure your light gives years of trouble free service.

As a commitment to producing the highest quality products for our customers, Avlite has been independently certified as complying with the requirements of ISO 9001:2008 quality management system.

By taking a few moments to browse through this booklet, you will become familiar with the versatility of your light, and be able to maximise its operating function.

Please remember to complete the Avlite warranty registration card accompanying your light.

## Technology

***Avlite Systems is a world-class solar lighting systems manufacturer with a proven reputation for rapid, innovative, and agile technology solutions designed specifically for defense, government, civil and humanitarian aid operations in the most remote, toughest environments.***

### **Electronics**

Avlite employs leading in-house electronic engineers in the design and development of software and related circuitry. All individual electronic components are sourced directly by Avlite procurement staff ensuring that only the highest quality components are used in our products.

### **LED Technology**

All aviation lights use the latest advancements in LED (Light Emitting Diode) technology as a light source. The major advantage of LED's over traditional light sources is well established in that they typically have an operational life in excess of 100,000 hours, resulting in substantial savings to maintenance and servicing costs.

### **Precision Construction**

Commitment to investing in the design and construction of injection-moulded parts including optic lenses, light bases and a range of other components ensures that all Avlite products are of a consistent and superior quality.

### **Optical Performance**

Avlite manufactures a range of aviation LED lenses moulded from multi-cavity dies. Complex shapes such as the AV70 and 16-segment multi-focus lenses are a testament to the company's superior in-house lens manufacturing capabilities and outstanding optical performance.

### **Award-winning, Patented Technology**

Several United States and Australian patent registrations are held on Avlite's range of innovative designs, with other regional patents pending in Canada, United Kingdom and Europe.



## AV-HL-RF-SOL Model

*Avlite's helipad light is a solar-powered, wireless controlled, completely self-contained LED heliport light designed to meet the standards of ICAO Annex 14 Touchdown and Lift-off perimeter lights and FAA Engineering Brief 87 Heliport Perimeter Light for Visual Meteorological Conditions. The solar powered helipad light gives over 50 hours of continuous operation at ICAO Annex 14 Touchdown and Lift-off perimeter light intensities.*

*The helipad light comes ready for operation straight from the box, simply bolt the light to the supplied frangible mount assembly and install.*

*The unit is made from tough, impact resistant polymers in aviation yellow. A premium grade solar module is integrated into the assembly and mounted to collect sunlight. The solar array charges the 16Ah battery during daylight hours.*

*Avlite's solar powered helipad light utilizes the same controller as Avlite's AV-425-RF and AV-70-RF models which means a single controller can control multiple Avlite fixtures including the solar range of; heliport beacons, taxiway lights, obstruction lights, lighted windsock and other products.*

*The radio controller is designed to support a number of operational modes including 3-step intensity adjustment, and switching the system between visual and IR.*

*The solar powered helipad light and other Avlite fixtures may be supplied integrated with a Pilot Activated Lighting Control (PALC) for remote operation of an unmanned heliport.*



**Tactical Model with dual light heads  
for Visible & NVG/IR Modes**



**Fig 2**

**SPECIFICATIONS \* \***

**AV-HL-RF-SOL**

**Light Characteristics**

Light Source  
Available colors  
Peak Intensity @ temporary high (cd)  
Horizontal Output (degrees)  
Vertical Divergence (degrees)

LED  
Red, Green, White, Yellow, Amber, Blue  
Up to 60cd (green)  
360  
20° - 90°: 3cd min  
13° - 20°: 8cd min  
10° - 13°: 15cd min  
5° - 10°: 30cd min  
2° - 5°: 15cd min  
>100,000

LED Life Expectancy (hours)

**Electrical Characteristics**

Circuit Protection  
Operating Voltage (V)  
Temperature Range

Integrated  
12  
-40 to 80°C

**Solar Characteristics**

Solar Module Type  
Output (watts)  
Solar Module Efficiency (%)  
Charging Regulation

Multicrystalline  
10  
14  
Microprocessor controlled

**Power Supply**

Battery Type  
Battery Capacity (Ah)  
Nominal Voltage (V)  
Autonomy (hours)

High Grade NiMH - environmentally friendly  
16  
12  
Over 50hrs of continuous operation at ICAO Annex 14 (high intensity)  
Over 150hrs of continuous operation (medium intensity)  
Over 500hrs of continuous operation (low intensity)

**Radio Controlled**

Frequency  
Compliance

2.4GHz ISM Band  
FCC / CE

**Physical Characteristics**

Body Material  
Light Mount Material  
Lens Material  
Lens Diameter (mm/inches)  
Lens Design  
Mounting  
Height (mm/inches)  
Length (mm/inches)  
Width (mm/inches)  
Mass (kg/lbs)  
Product Life Expectancy

UV stabilized polymer  
7-stage powder coated aluminium  
LEXAN® Polycarbonate - UV stabilized  
100 / 3<sup>7</sup>/<sub>8</sub>  
Single LED Optic  
Frangible mount  
250 / 9<sup>7</sup>/<sub>8</sub>  
520 / 20<sup>1</sup>/<sub>2</sub>  
360 / 14<sup>1</sup>/<sub>8</sub>  
Approximately 14 / 30<sup>7</sup>/<sub>8</sub>  
Up to 12 years

**Environmental Factors**

Humidity  
Icing  
Wind Speed

0 to 100%, MIL-STD-810F  
22kg per square inch  
Up to 160kph

**Certifications**

CE  
Quality Assurance  
Waterproof

EN61000-6-3:1997, EN61000-6-1:1997  
ISO9001:2008  
IP67

**Intellectual Property**

Trademarks

AVLITE® is a registered trademark of Avlite Systems  
3 year warranty

**Warranty \***

**Options Available**

• Avlite Pilot Activated Lighting Control  
• IR LED

\* Specifications subject to change or verification without notice  
• Subject to standard terms and conditions



**SPECIFICATIONS \* \***

**AV-ALS-RC-2.4-AVMESH**

**Electrical Characteristics**

Range	Up to 1.4km, AvMesh®
Temperature Range	-40 to 80°C
Frequency (GHz)	2.4
Nominal Voltage (V DC)	7.2

**Power Supply**

Battery Type	High grade NiMH - Environmentally friendly
Battery Capacity (Ah)	4
Battery Voltage (V DC)	7.2

**Physical Characteristics**

Case Material	Anodised aluminium
Screen	Backlit
Product Life Expectancy	Up to 12 years

**Certifications**

FCC Approved	M100103
CE	EN61000-6-3:1997. EN61000-6-1:1997
Quality Assurance	ISO9001:2008

**Intellectual Property**

Trademarks AVLITE® is a registered trademark of Avlite Systems

**Warranty \***

1 year warranty



**Handheld controller and charger in protective case**

• Specifications subject to change or variation without notice  
\* Subject to standard terms and conditions





## Assembly & Installation

The installation of the AV-HL-RF-SOL Solar Airfield Light includes the following steps:-

- Unpacking
- Initial Inspection
- Assembling the light & configuration of settings
- Installing the light assembly

Tools required for assembly:-

- 6mm Allen Key

### Unpacking & Initial Inspection

Unpack all hardware and inspect for damage. If there is any damage, please contact your Avlite Office. Retain original packing material for possible future use in shipping the AV-HL-RF-SOL.

### Assembling the Light & Configuration of Settings

- Open the latches of the unit to open the lid*
- Plug the battery in the connector.*
- The default Light Group setting is '0'. To set the light to a specific light group, adjust the Rotary Switch A on the PCB found within the internal yellow enclosure.*
- To test operation of the light, the Radio Controller will need to be used (see "Using the Radio Control to activate the HLS System" section of manual for information)*
- Close lid and secure latches*
- Bolt the light into location*

**NOTE:** *A sealed vent on the base allows air transfer without moisture intake and should not be disturbed*





## How Does the System Work?

The Avlite HLS System works by using a hand held radio controller to activate and setup an entire heliport, airfield, airport or air base. The system utilises an embedded R/F module operating in the 2.4Ghz ISM Band.

The lights can be configured for up to 15 different light groups. This allows the airfield to independently control different areas, such as multiple runways, taxiways and helipads.

Due to the handheld nature of the Radio Controller, it can be used from most positions in the airfield. This can allow for easy and efficient inspection or activation of different light groups in the airfield without affecting other lights.

## Best Practice

It is best to locate the controller as close as practically possible to the helipad when sending commands to achieve the minimum response time.

The two operational modes for best practice are; 1. Low-intensity dusk-till-dawn, whereby it is self-activated when it senses darkness, and 2. On-demand high-intensity mode, whereby the light operates at compliant ICAO Annex 14 photometric profiles for short periods when triggered by the RF controller.

In both instances it is important to confirm solar availability is sufficient to operate the fixture at required usage profile.

The battery inside the light will require extra charge time the following day if the lights are run at HIGH intensity for more than the recommended time. This can be negated by connecting the lights to an external power supply (where AV-HL-RF-SOL lights are fitted with an external battery charging port).

If these lights are plugged into an external power supply they can be run at any intensity for any length of time without depleting the battery.

## Manual Light Activation via External Momentary Button

The AV-HL-RF-SOL lights are fitted with an external momentary button for manual light operation. The momentary button is incorporated in the AV-HL-RF-SOL for emergency use or in case the radio controller is lost or damaged. This button enables the user to manually turn the light on and step through the three different intensity levels.

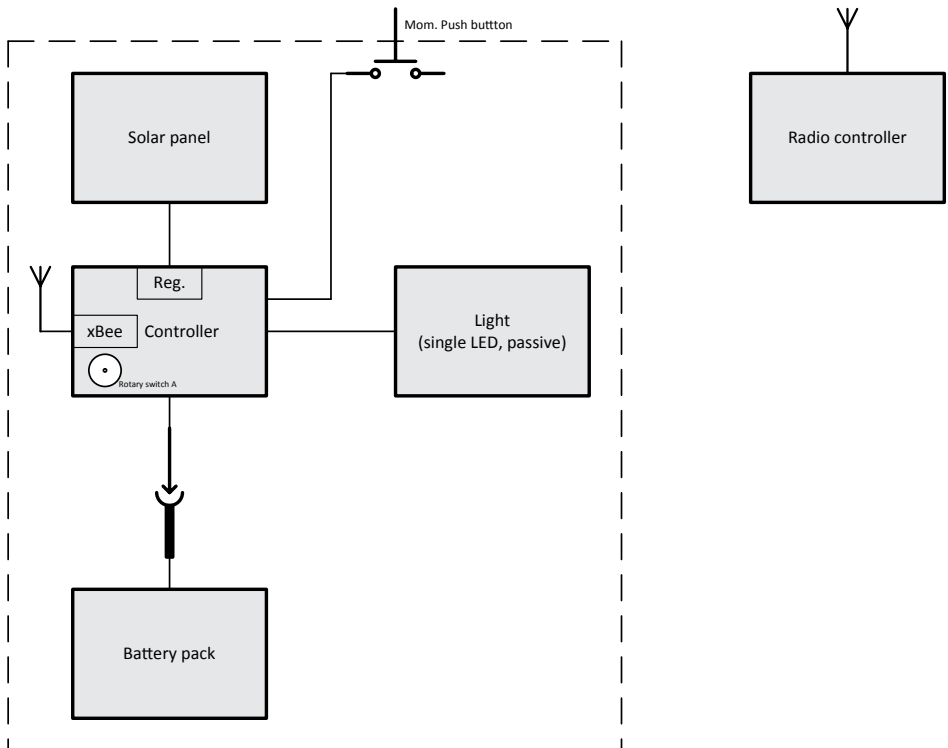
To activate the AV-HL-RF-SOL using the momentary button:-

- a. Hold down the push button for 3 seconds. (The light will activate in LOW intensity mode)
- b. Press the momentary button again it will adjust to MEDIUM intensity mode
- c. Press the momentary button a third time to achieve HIGH intensity mode
- d. Pressing the momentary button again will return the intensity to LOW.

**Notes:**

- When the controller is found or repaired, the lights will revert back to radio control as soon as they receive a new message/command from the radio controller.

## Block Diagram



**Fig 3**

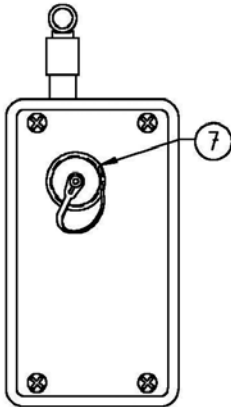
## Avlite Radio Controller

The Avlite Radio Controller is a compact handheld unit that allows complete control of the heliport lighting system. The unit allows you to move around the airfield for easy activation, inspection and testing of the airfield lights. The Avlite Radio Controller works on the 2.4GHz ISM Band using a low power RF module. The backlit, LCD can be seen during day or night. The straightforward menu makes the HLS easy to operate.

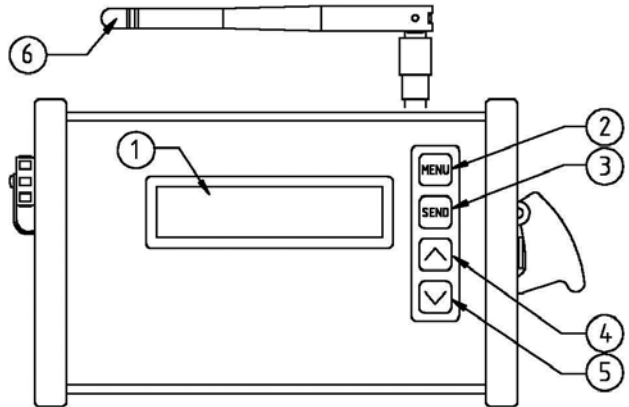
The Avlite Radio Controller comes standard with an IP68 rated charging plug, omni-directional antenna and ON/OFF switch and cover. It can also be optioned with an RS232 input.

The Radio Controller and charger come in an IP68 'Pelican' Case to protect it from the harsh environment to which it may be subjected.

The Avlite Radio Controller can be rack mounted in a standard 19" rack for use with other airfield electronic equipment such as PALC.



**Fig 4 Radio Controller Side View**



**Fig 5 Radio Controller Front View**

- 1 LCD Screen
- 2 MENU Button
- 3 SEND Button
- 4 UP Button
- 5 DOWN Button
- 6 Antenna
- 7 Charging Port – IP68 sealed plug. (Charger not shown)
- 8 RS232 input. (Optional)



## Assembly & Installation of Radio Controller

The installation of the Radio Controller includes the following steps:-

- Unpacking
- Initial Inspection
- Assembling & Charging the Radio Controller
- Using the Radio Controller

### Unpacking instructions

Unpack all hardware and verify container contents in accordance with Fig. 4 & 5. Please contact your Avlite office if there is any hardware missing.

### Initial inspection

Inspect the Radio Controller for damage. If there is any damage, please contact your Avlite office. Retain original packing material for possible future use.

### Assembly & Charging

The Radio Controller can be activated after raising the aerial into the upright position, see Fig 5. It may be necessary to charge the Radio Controller before use.

### Turning the Unit On

To turn the unit on, lift the red missile cover and flick the switch.

The radio controller will take 5 seconds to start up.

### Charging the Radio Controller

- a. Unscrew the protective cap from the charging port, on the left side of the Radio Controller.
- b. Insert the charging terminal into the Radio Controller.
- c. Plug the charger into a wall socket and turn the charger on.
- d. The light on the charger will flash Green, Orange, Red then back to Orange.
- e. The charger has a LED to indicate the charge sequence.
  - i. Green – Unit is fully charged. The Radio Controller can be left connected in state.
  - ii. Orange – Unit is charging. The unit will charge for a maximum of 8 hours before automatically shutting down.
  - iii. Red – A fault is occurring, please contact Avlite Office.



## Radio Controller Menu

This section of the document will provide a short explanation of all the menu screens on the control unit.

### Modes of Operation

The operational Mode defines how the light will respond to different environmental conditions & user inputs. There are three operational modes that can be selected via the controller. *ALWAYS ON, STANDBY & DUSK till DAWN.*

#### ALWAYS ON Operational Mode

The light is *Always On*. The light will be lit both day & night. While the light is in this mode it will only turn off when the battery drops below the Flat Battery Voltage level. (AV-HL-RF-SOL = 3.1V)

#### STANDBY Operational Mode

The light is *Always Off*. While the light is in this mode it will still respond to and pass on commands, sent by the controller. This mode should be used if the lights have been installed outside but are not currently required.

**Note:** The light is not completely powered down in a manner suitable for storage. If the light is to be stored in a warehouse or other dark environment the ON/OFF switch should be turned off.

#### DUSK till DAWN Operational Mode

The light is turned on and off based on the light sensor internal to each light. If the light is in the darkness, it will turn on. If the light is in daylight, it will turn off.

### Light Group

This menu is used to select the current light group. The light group of each light is selected via rotary switch A found on the bottom of the circuit board, in the Light Head. The controller can select any one of the 10 individual light groups

(0 -> 9) or select all radio lights at once.

**Note:** The units are set with a light group of 0 in the factory.

### LED Intensity

Default = LOW

This menu is used to select the intensity of the LEDs on the light. The options include *Low, Medium & High.*

- a. Low – LED intensity is set to low setting (approx 10%)
- b. Medium - LED intensity is set to medium intensity (approx 30%).
- c. High - LED intensity is set to high intensity (approx 100%)

Note: this menu will not be enabled if the selected operational mode is *STANDBY*

### Timeout Mode

This menu is used to setup the LED high intensity timeout feature found in each light. The options include *Enabled LOW, Disable.*

- a. Enabled LOW – The immediate LED intensity is selected via the LED Intensity menu, after Timer Duration the LED Intensity will revert back to the LOW setting
- b. Disable – The high intensity LED timeout is disabled. The LED intensity will be selected via the LED intensity menu.

**Note:** This menu will not be enabled if the selected operational mode is *STANDBY*

### Timeout Duration

This menu is only visible when the timeout Mode is enabled. This menu is used to select the timeout duration, the time before the LED intensity reverts back to its LOW intensity state. The timeout duration can be set from 1 minute to 60 minutes.

### LED Bank Setup

All Avlite HLS systems can have the option of having the lights built with multiple colours, in different LED banks. This can allow a runway to be changed from Visible to I/R at the press of a button.

The options include *VISIBLE & IR*.

**Note:** this menu will not be enabled if the selected operational mode is *STANDBY*

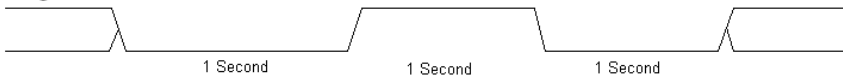
### Battery Diagnostic

**Default = Disable**

This feature can be used to check the battery voltage in every light in the HLS. The command can be sent any time and it will not affect the current state of the light. If the light is in *STANDBY* mode the light will turn on as shown below and revert to *STANDBY* mode after the diagnostic has been completed.

- If the battery voltage is within operational range the light will turn off for 1 second, flash once, then turn off for 1 second.
- If the battery voltage is low the light will turn off for 1 second, flash twice, then turn off for 1 second.

#### Diagnostic Pass



#### Diagnostic Fail



### Sending Commands

Every time the SEND button is pressed a command is sent containing all the current settings in the Radio Controller.

The SEND button can be used after changing one setting or after changing multiple settings.

For further information see section under “How does the System Work”.



## Using the Radio Control to Activate the Heliport Lighting System (HLS)

The Radio Controller is very easy to use. Make sure that all the lights in the same Light Group have had the rotary switches set correctly, see “Assembling the Light” section for details.

### Turn All the Lights ON

- Turn the Radio Controller On
- Use the arrow keys to adjust the operational mode to ALWAYS ON
- Press MENU button once to reach Light Group
- Set the Light Group to ALL
- Press SEND button
- Every light within range of the control unit will now turn on.

### Turn All the Lights OFF

- Turn the Radio Controller On
- Use the arrow keys to adjust the operational mode to STANDBY
- Press MENU button once to reach Light Group
- Set the Light Group to ALL
- Press SEND button
- Every light within range of the control unit will now turn on.

## External Battery Charging Port

The Solar Heliport Light has a charge port connector enabling the user to connect an external charger/ power supply to

- Assist in keeping batteries charged when in storage
- Fast-charge for demanding usage profiles
- Fast-charge for poor solar environments

The external charger can be connected/disconnected at any time and does not affect the normal operation of the light.

Please contact Avlite to purchase an external charger. Avlite Part no. BTC-NIMH-12V

**WARNING:** Do not connect the charger of the radio controller to that charge port.



## Maintenance and Servicing

Designed to be largely maintenance free the AV-HL-RF-SOL light requires minimal attention, though the following maintenance and servicing information is provided to help ensure the life of your Avlite product.

### General Maintenance

- a. Cleaning Solar Panels- Occasional cleaning of the solar panels may be required. Using a cloth and warm soapy water, wipe off any foreign matter before rinsing the panels with fresh water.
- b. Battery Check- Inspection of batteries should be performed annually to ensure that the charger, battery and ancillary electronics are functioning correctly. Using a voltage meter, check that the correct battery voltage is at least 12 volts under 100mA load for the AV-HL-RF-SOL and ensure all terminals are clear of foreign matter.

### Replacing the Battery in AV-HL-RF-SOL

The user has the ability to change the battery after years of operation.

- a. Undo latches and open lid.
- b. Undo battery clamp and detach battery leads.
- c. Remove battery from AV-HL-RF-SOL case.
- d. Discard old battery in a safe manner.
- e. Reattach leads to new battery and then place back into case, fix battery clamps.
- f. To test operation of the light, the remote control will need to be used (see "Using the Radio Control to activate the HLS System" section of manual for information).

***Care must be taken to observe the polarity of the battery before the leads are re-connected, and ensure the replacement battery is correctly fitted. Always recycle old batteries.***

### AV-HL-RF-SOL Long Term Battery Storage

If the AV-HL-RF-SOL are to be placed in storage for an extended period please follow the below information.

- The NiMH batteries inside the AV-HL-RF-SOL must always be stored in a fully charged state.
- Disconnect the connector from the battery before placing the light in storage.
- All batteries will discharge over time and the rate of discharge is dependent on temperature.
- If the light is being stored in temperatures greater than 30DegC the battery will discharge faster.
- Please check battery every 2-4 months and recharge if necessary,

### Recharging the Battery

Reconnect the battery and place unit in the sun for 2-4 days

Or

Place the light in front of a halogen lamp for 2-3 days (*do not place the halogen light too close to the solar panel or the panel may be overheated*)



## Trouble Shooting

Problem	Remedy
Light will not activate.	<ul style="list-style-type: none"> <li>• Ensure light is set to correct light group</li> <li>• Ensure internal battery connector in the AV-HL-RF-SOL is connected</li> <li>• Ensure battery is properly connected</li> <li>• Ensure battery voltage is above 12volts.</li> </ul>
Light will not operate for the entire night.	<ul style="list-style-type: none"> <li>• Expose light to direct sunlight and monitor operation for several days Avlite products typically require 1.5 hours of direct sunlight per day to retain full autonomy. From a discharged state, the light may require several days of operational conditions to 'cycle' up to full autonomy</li> <li>• Reducing the light output intensity will reduce current draw on the battery</li> <li>• Ensure solar module is clean and not covered by shading, fouling or dust during the day</li> </ul>
Lights are constantly on during the day.	<ul style="list-style-type: none"> <li>• Ensure the Radio Controller is not set to ON (see "Modes of Operation" section of manual) &amp; change the setting as required</li> </ul>
<i>Radio Controller will not turn on.</i>	<ul style="list-style-type: none"> <li>• Recharge the battery. The unit can be left attached to the charger for a constant battery charge.</li> </ul>



## Avlite Light Warranty V1.1

### Activating the Warranty

Upon purchase, the Avlite Systems warranty must be activated for recognition of future claims. To do this you have two (2) options:

1. **Postal Registration**

Please complete the Avlite Systems Warranty Registration Card and return to Avlite within 30 days of your purchase.

2. **Online Registration**

Please complete the Online Registration Form at; [www.avlite.com](http://www.avlite.com)

***Avlite Systems will repair or replace your lantern in the event of electronic failure for a period of up to three years from the date of purchase.***

***The unit must be returned to Avlite freight prepaid.***

### Warranty Terms

1. Avlite Systems warrants that any Avlite aviation products fitted with telemetry equipment including but not limited to AIS, GSM, GPS or RF ("Telemetry Products") will be free from defective materials and workmanship under normal and intended use, subject to the conditions hereinafter set forth, for a period of twelve (12) months from the date of purchase by the original purchaser.
2. Avlite Systems warrants that any rotationally-moulded products ("Roto-Moulded Products") and accessory products ("Accessory Products") will be free from defective materials and workmanship under normal and intended use, subject to the conditions hereinafter set forth, for a period of twelve (12) months from the date of purchase by the original purchaser.
3. Avlite Systems warrants that any Avlite aviation products other than the Telemetry Products, Roto-Moulded Products and Accessory Products ("Avlite Products") will be free from defective materials and workmanship under normal and intended use, subject to the conditions hereinafter set forth, for a period of three (3) years from the date of purchase by the original purchaser.
4. Avlite Systems will repair or replace, at Avlite's sole discretion, any Telemetry Products, Roto-Moulded Products, Accessory Products or Avlite Products found to be defective in material and workmanship in the relevant warranty period so long as the Warranty Conditions (set out below) are satisfied.
5. If any Telemetry Products or Avlite Products are fitted with a rechargeable battery, Avlite Systems warrants the battery will be free from defect for a period of one (1) year when used within original manufacturer's specifications and instructions.

### Warranty Conditions

This Warranty is subject to the following conditions and limitations;

1. The warranty is applicable to lanterns manufactured from 1/1/2009.
2. The warranty is void and inapplicable if:
  - a. the product has been used or handled other than in accordance with the instructions in the owner's manual and any other information or instructions provided to the customer by Avlite;
  - b. the product has been deliberately abused, or misused, damaged by accident or neglect or in being transported; or
  - c. the defect is due to the product being repaired or tampered with by anyone other than Avlite or authorised Avlite repair personnel.
3. The customer must give Avlite Systems notice of any defect with the product within 30 days of the customer becoming aware of the defect.
4. Rechargeable batteries have a limited number of charge cycles and may eventually need to be replaced. Typical battery replacement period is 3-4 years. Long term exposure to high temperatures will shorten the battery life. Batteries used or stored in a manner inconsistent with the manufacturer's specifications and instructions shall not be covered by this warranty.



5. No modifications to the original specifications determined by Avlite shall be made without written approval of Avlite Systems.
6. Avlite lights can be fitted with 3rd party power supplies and accessories but are covered by the 3rd party warranty terms and conditions.
7. The product must be packed and returned to Avlite Systems by the customer at his or her sole expense. Avlite Systems will pay return freight of its choice. A returned product must be accompanied by a written description of the defect and a photocopy of the original purchase receipt. This receipt must clearly list model and serial number, the date of purchase, the name and address of the purchaser and authorised dealer and the price paid by the purchaser. On receipt of the product, Avlite Systems will assess the product and advise the customer as to whether the claimed defect is covered by this warranty.
8. Avlite Systems reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any product without notice or obligation to any person.
9. Input voltage shall not exceed those recommended for the product.
10. Warranty does not cover damage caused by the incorrect replacement of battery in solar lantern models.
11. This warranty does not cover any damage or defect caused to any product as a result of water flooding or any other acts of nature.
12. There are no representations or warranties of any kind by Avlite or any other person who is an agent, employee, or other representative or affiliate of Avlite, express or implied, with respect to condition of performance of any product, their merchantability, or fitness for a particular purpose, or with respect to any other matter relating to any products.

### **Limitation of Liability**

To the extent permitted by section 68A of the Trade Practices Act 1974 (Cth), the liability of Avlite Systems under this Warranty will be, at the option of Avlite Systems, limited to either the replacement or repair of any defective product covered by this Warranty. Avlite Systems will not be liable to Buyer for consequential damages resulting from any defect or deficiencies in accepted items.

### **Limited to Original Purchaser**

This Warranty is for the sole benefit of the original purchaser of the covered product and shall not extend to any subsequent purchaser of the product.

### **Miscellaneous**

Apart from the specific warranties provided under this warranty, all other express or implied warranties relating to the above product is hereby excluded to the fullest extent allowable under law. The warranty does not extend to any lost profits, loss of good will or any indirect, incidental or consequential costs or damages or losses incurred by the purchaser as a result of any defect with the covered product.

### **Warrantor**

Avlite Systems has authorised distribution in many countries of the world. In each country, the authorised importing distributor has accepted the responsibility for warranty of products sold by distributor. Warranty service should normally be obtained from the importing distributor from whom you purchased your product. In the event of service required beyond the capability of the importer, Avlite Systems will fulfil the conditions of the warranty. Such product must be returned at the owner's expense to the Avlite Systems factory, together with a photocopy of the bill of sale for that product, a detailed description of the problem, and any information necessary for return shipment.

**Other Avlite Products Available**



**Solar Aviation Lighting**



**Radio Controlled & PALC Systems (FCC Compliant)**



**Obstruction Lighting (LIOL A & LIOL B)**



**Airfield Markers & Accessories**

**Typical Applications**

- Temporary & permanent airfield lighting
- Remote, emergency & defence airfield lighting
  - Barricade, hazard & perimeter lighting
  - Helipad lighting
- Obstruction lighting

For a complete list of product compliances including ICAO & FAA, please contact Avlite today



**Area & Sign Lighting**



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