

Avlite[®]
www.avlite.com



AV-FL-RF-SOL

Radio Controlled Solar Helipad Floodlight
Installation & Service Manual

Version 1.3

AV-FL-RF-SOL

Radio Controlled Solar Helipad Floodlight

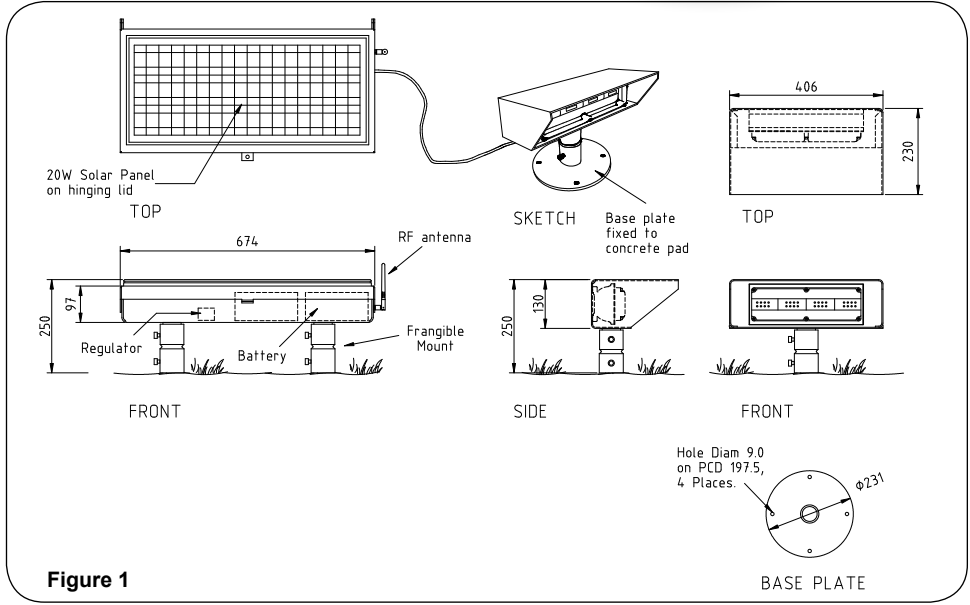
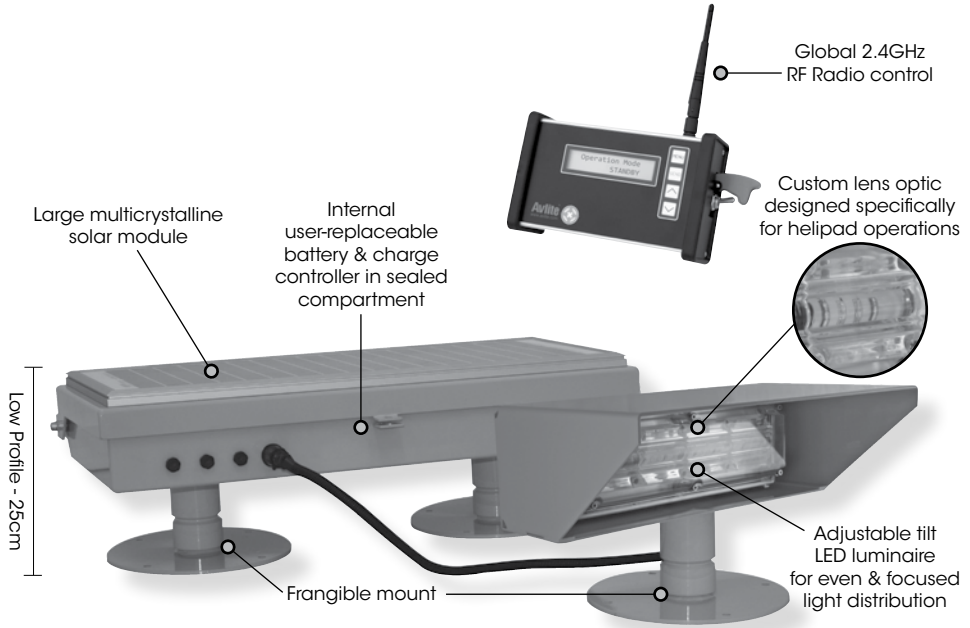


Figure 1

Table of Contents

Introduction	4
Technology	4
AV-FL-RF-SOL Model	5
Assembly & Installation	8
Assembling the Light & Configuration of Settings	8
TLOF Light Arrangement	11
LED Floodlight Unit Adjustment.....	12
Charge Port	13
How Does the HLS System Work?	14
Standard Operation Mode	14
Best Practice	14
Manual Light Activation via External Override Switch	15
Block Diagram	15
Avlite Radio Controller	16
Assembly & Installation of Radio Controller	17
Unpacking Instructions	17
Initial Inspection.....	17
Assembling & Charging	17
Turning the Unit On	17
Charging the Radio Controller.....	17
Radio Controller Menu	18
Modes of Operation	18
Light Group	18
Timeout Duration	19
LED Bank Setup	19
Battery Diagnostic.....	19
Sending Commands	19
Using the Radio Control to Activate the Heliport Lighting System (HLS)	19
Turn All the Lights ON.....	19
Maintenance & Servicing	20
Trouble Shooting	21
Avlite Light Warranty	22

Version No.	Description	Date	Approved
1.0	Manual Launch	August 2012	S. Turner
1.1	Updated spec table	January 2013	J. Dore
1.2	General updates	March 2013	A. Groell
1.3	Assembly & Charge 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 aviation 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. The company has superior in-house lens manufacturing capabilities to support 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-FL-RF-SOL Model

Avlite's solar powered, wireless controlled LED floodlight has been specifically designed for helipads to provide uniform surface lighting where the TLOF and FATO lights need to be supplemented with floodlighting. It offers a solar-powered, LED based solution to the ICAO touchdown and lift-off area perimeter floodlights.

The self-contained solar powered light has an integrated solar and battery system, which means it can be installed in locations which do not have access to reticulated power - allowing safe illumination without the need to lay costly cabling or utilise generators.

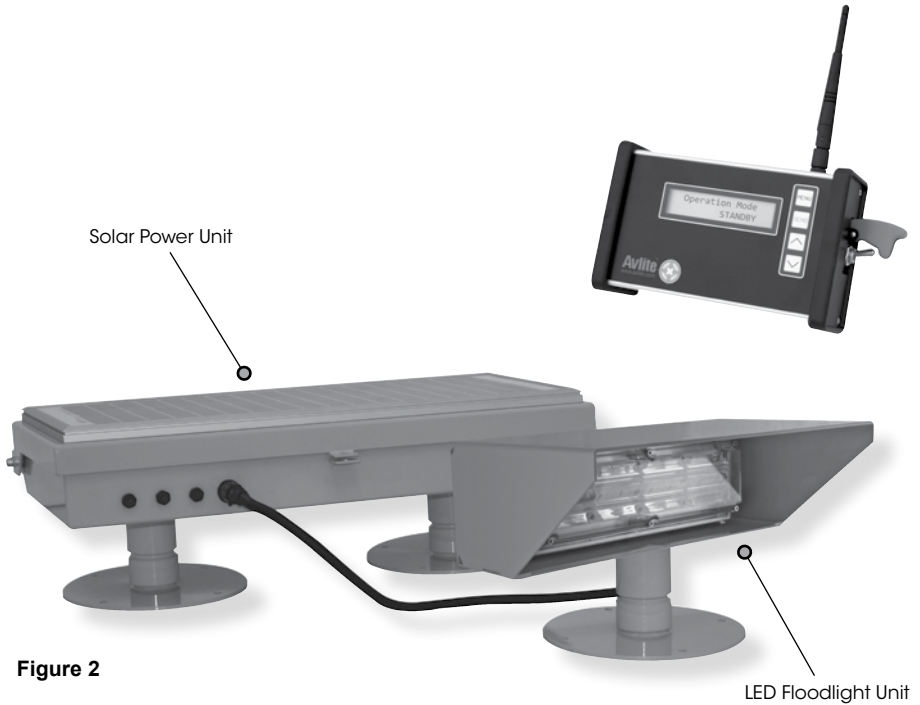


Figure 2

SPECIFICATIONS * *

AV-FL-RF-SOL

Light Characteristics

Light Source
Available colors
LED Life Expectancy (hours)

LED
White, other colors available on request
>100,000

Electrical Characteristics

Voltage (V)
Circuit Protection
Temperature Range

12
Integrated
-40 to 80°C

Solar Characteristics

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

Multicrystalline
20
14
Microprocessor controlled

Power Supply

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

SLA (Sealed Lead Acid)
18
12

Radio Controlled

Frequency
Compliance

2.4GHz ISM Band
FCC / CE

Physical Characteristics

Body Material
Lens Material
Mounting
Height (mm/inches)
Length (battery housing)(mm/inches)
Length (luminaire housing)(mm/inches)
Width (battery housing)(mm/inches)
Width (luminaire housing)(mm/inches)
Mass (kg/lbs)
Product Life Expectancy

7-stage powder coated aluminium
LEXAN® Polycarbonate - UV stabilized
Fragible mount
250 / 9¾
674 / 26½
406 / 16
332 / 13⅛
230 / 9
18.4 / 40½
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 (electronic enclosures)

EN61000-6-3:1997. EN61000-6-1:1997
ISO9001:2008
IP68

Intellectual Property

Trademarks

AVLITE® is a registered trademark of Avlite Systems

Warranty *

3 year warranty

Options Available

- Avlite Pilot Activated Lighting Control
- Mains power

* Specifications subject to change or variation 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-FL-RF-SOL Solar Aviation Light includes the following steps:-

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

Tools required for assembly & installation:-

- Hammer
- 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-FL-RF-SOL .

Assembling the Light & Configuration of Settings



- 1. Before activating the lights, the lights must be layed out on the helipad in the location they will be installed.**
- 2. RF lights should always be installed on mounting plates or stakes.**

a) LED Floodlight Unit

- Setup a number¹ of concrete pads at equidistant points around the TLOF at ground level. The concrete pads should have a dimension of approximately 40cm x 40cm with with sufficient depth depending on soil conditions. NOTE: As an alternative it is possible to use rubber tiles instead of concrete pads.
- Embed four bolts. Use the Mount Base as a placing template
- Make sure the concrete pads are dry and hard before fixing the Mount Base using washers and screw nuts. Make sure the Mount Base is levelled
- Fix the Frangible Sleeve (76mm) on top of the Mount Base using the hex socket
- Fix the LED Floodlight Unit on top of the Frangible Sleeve
- Point the LED Floodlight Unit into the desired direction². Make sure the LED Floodlight Unit is just below 25cm high and levelled
- Fix the light by tightening the hex sockets at the Frangible Sleeve

¹ Number of required / planned lights

² Please refer to "TLOF Light Arrangement" section of this manual

- b) Solar Power Unit
- Setup another concrete pad next to each LED Floodlight Unit for the Solar Power Units. Make sure the Solar Power Unit is in close proximity to the LED Floodlight Unit / within cable length. The concrete pads should have a dimension of approximately 80cm x 40cm with with sufficient depth depending on soil conditions. Use the Solar Power Unit and Mount Base as a placing template.
NOTE: As an alternative it is possible to use rubber tiles instead of concrete pads.
 - Embed eight bolts. Use the Mount Base as a placing template
 - Make sure the concrete pads are dry and hard before fixing the Mount Bases using washers and screw nuts. Make sure the Mount Bases are levelled
 - Fix the Frangible Sleeves (98mm) on top of the Mount Bases using the hex socket
 - Fix the Solar Power Unit on top of the Frangible Sleeves
 - Make sure the Solar Power Unit is just below 25cm high and levelled
 - Fix the Solar Power Unit by tightening the hex sockets at the Frangible Sleeve
- c) Open the Solar Power Unit
- d) Open the electronic compartment inside the Solar Power Unit
- e) Connect the cable with the two ring terminals to the battery. Please note the polarity.
- f) Connect the LED Floodlight Unit with the Solar Power Unit
- g) Fix the antenna underneath the Solar Power Unit
- h) Set the Light Group by adjusting the Rotary Switch A on the PCB (please refer to Figure 3)

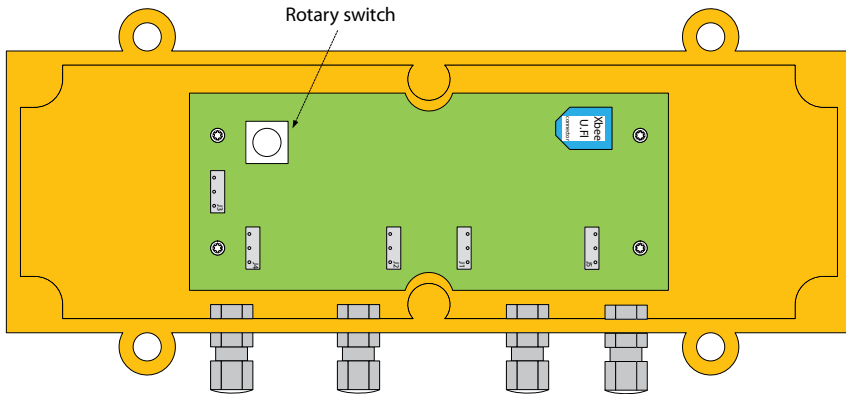


Figure 3. Rotary switch

- i) Determine, to which group, each individual light belongs. E.g., taxiway edge lights = 0, runway edge lights = 1, obstruction lights = 2, threshold lights = 3, etc... Adjust Rotary Switch A to the appropriate light group. E.g. 0, 1, or 2
- j) Test the operation of the light by using the Radio Controller (see “Using the Radio Control to activate the HLS System” section of manual for information).
- k) Close electronic enclosure and lid of the solar Power Unit. Secure lid with provided bolt
- l) Bolt the light into its final location

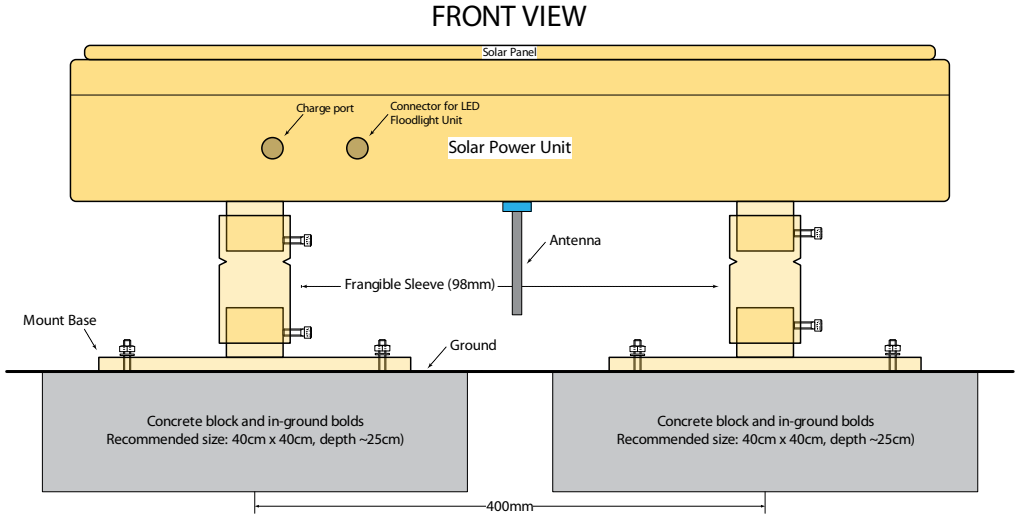


Figure 4. Solar Power Unit

TLOF Light Arrangement

- Best TLOF area illumination can be archived by an equidistant arrangement of the LED Floodlight Units around the Helipad.

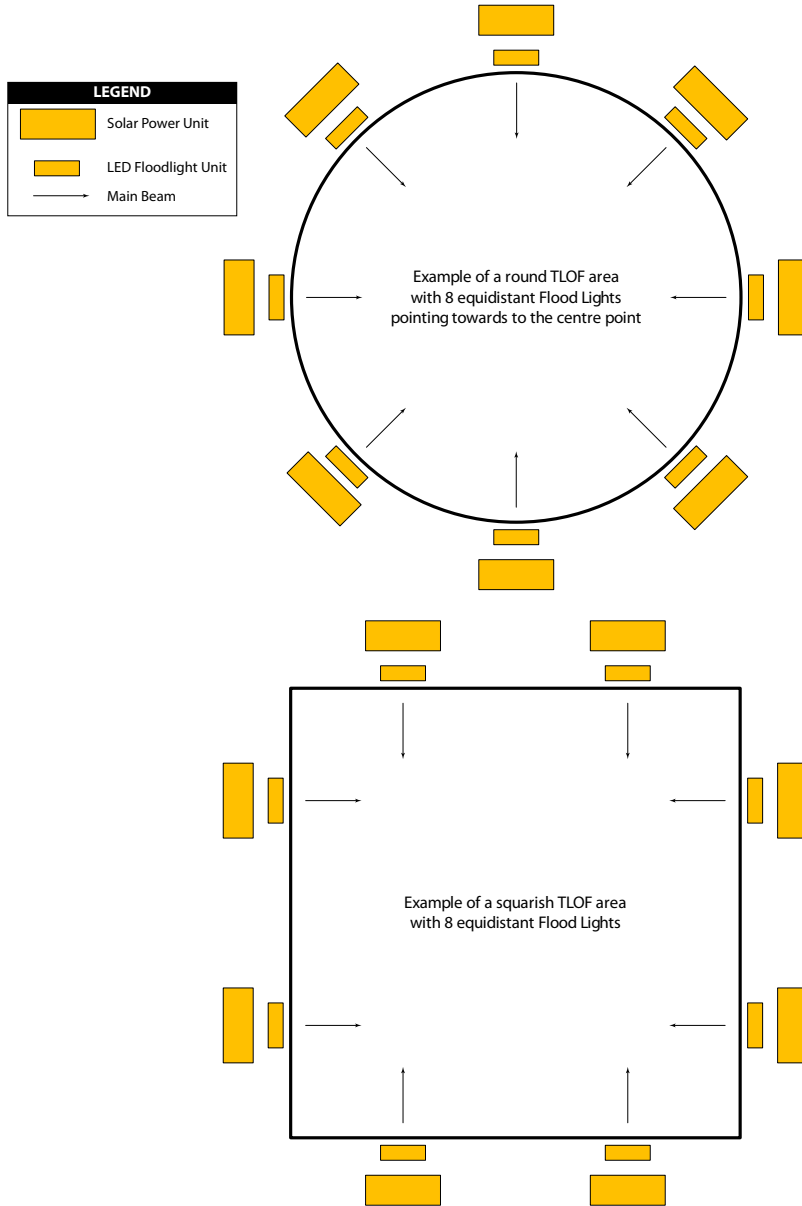


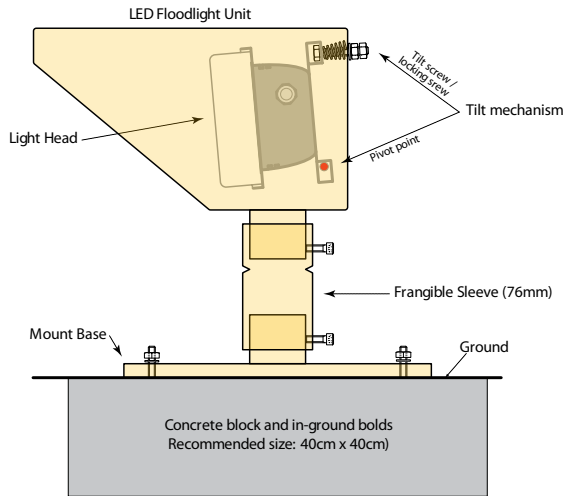
Figure 5. Design examples of a round and square TLOF area with 8 equidistant floodlights

LED Floodlight Unit Adjustment

By using the tilt mechanism each individual LED Floodlight Units can be precisely adjusted. For that the user has to use the following steps:

- Loosen the two nut screws at the back of the LED Floodlight Unit (please refer to Figure 6)
- Adjust the Light Head as required by turning the Tilt Screw Nut. A spring between the LED Floodlight Unit and the Light Head will provide the required tension
- After the adjustment secure the tilt / position of the Light Head by tighten the Locking Screw Nut

SIDE VIEW



REAR VIEW

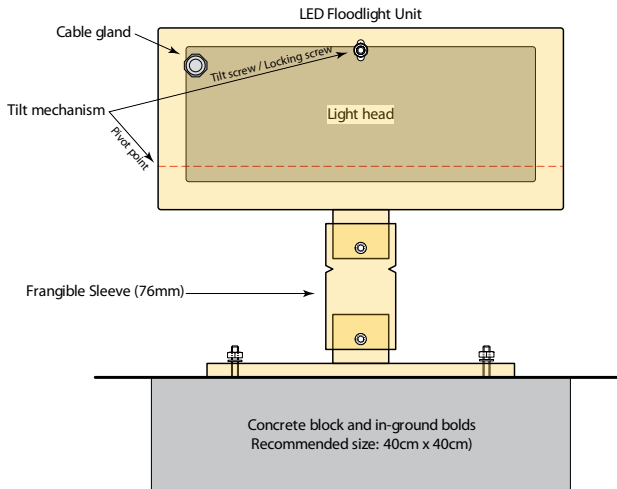


Figure 6. Tilt mechanism

Best practice:

For an even light distribution with minimum/no glare please use the following steps:

- Perform the adjustment at night
- Switch off all lights except one
- Go to the opposite light and check for possible glare
- Adjust the Light Head to minimize any glare as described in “LED Floodlight Unit adjustment” section of this manual
- Switch off the adjusted LED Floodlight Unit and perform the tilt adjustment at the next LED Floodlight Unit until all lights are adjusted as required

For details please refer to Figure 7

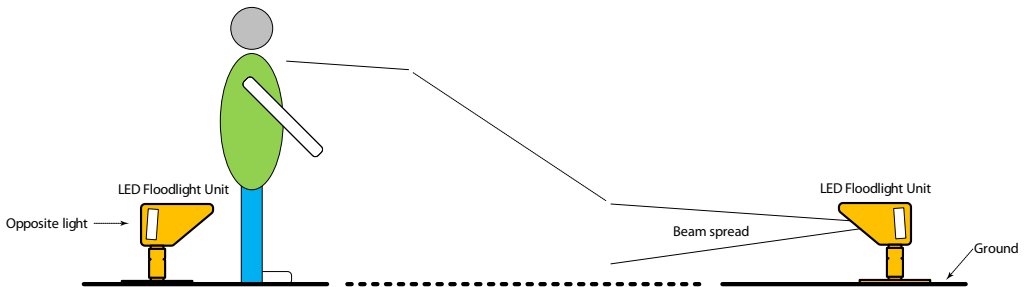


Figure 7. Beam direction

Charge Port

The Solar Helipad Floodlight has a charge port connector at the front of the Solar Power Box. It enables 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 Sealite for possible charger / power supply options.

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



How Does the HLS 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.

Standard Operation Mode

Turn ON/OFF the Floodlight by using the radio controller.

Best Practice

It is best to locate the controller as close to the helipad as practicably possible.

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-FL-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 Override Switch

The AV-FL-RF-SOL lights (LED Floodlight Unit) are fitted with an external override switch for manual light operation.

The override switch is for emergency use or in case the radio controller is not operational. This override switch enables the user to manually turn the light ON and OFF

To activate the AV-HLS-SOL-RF using the override switch:-

Position 1: The light will switch ON permanently and override any radio controller command.

Position 2: The light will switch OFF and follow the radio controller command.

Block Diagram

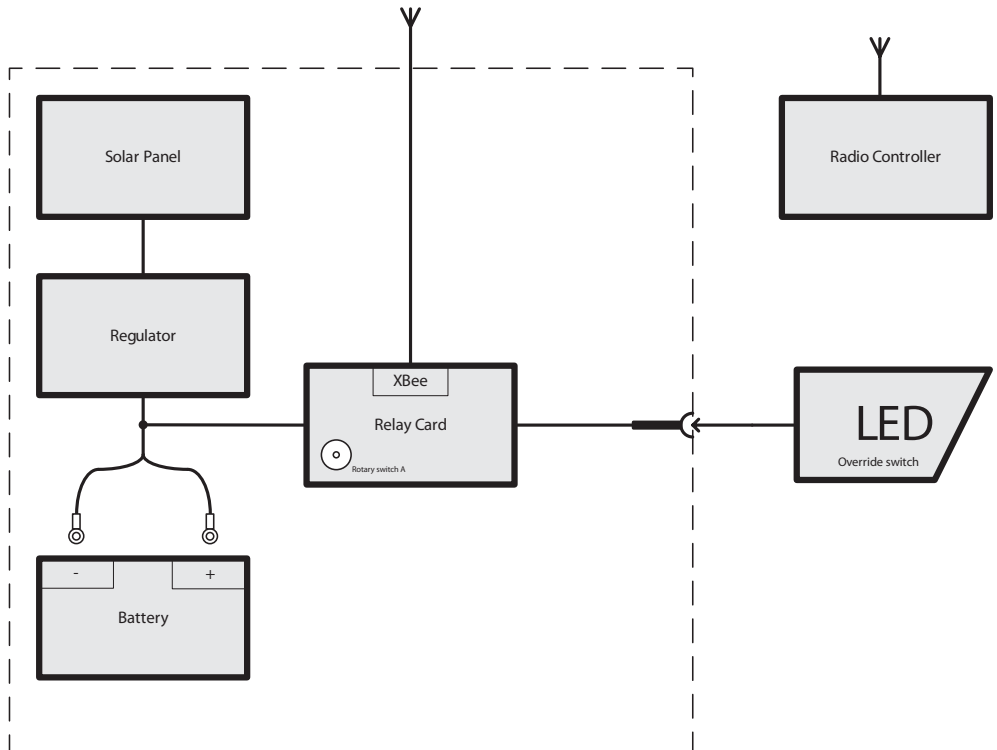


Figure 8. Block Diagram

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.

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.

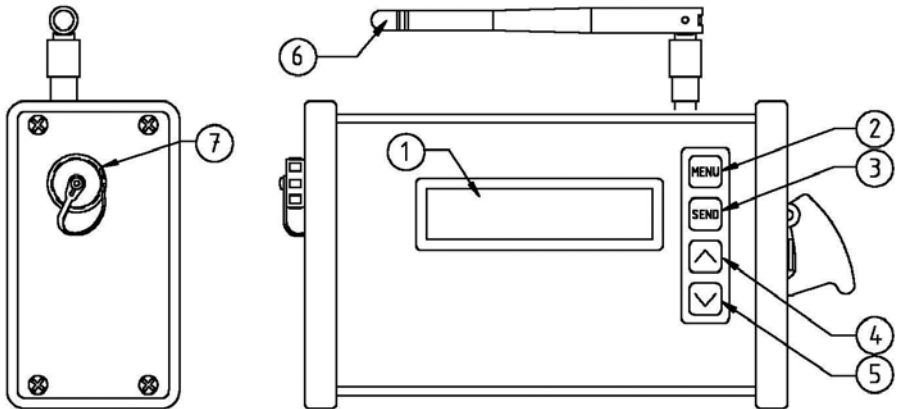


Figure 9. Radio Controller Side View **Figure 9. Radio Controller Front View**

- 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 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-FL-RF-SOL = 11V)

STANDBY Operational Mode

The light is 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 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 battery connector should be disconnected..

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.

Note: DUSK till DAWN Operational Mode is currently not applicable for the AV-FL-RF-SOL

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 Solar Power Unit. 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

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 light will switch OFF.

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*

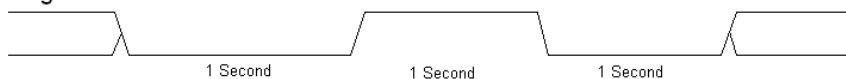
Battery Diagnostic

Default = Disable

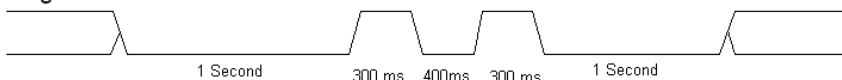
This feature can be used to check the battery voltage in every light in the HLS. The command can be sent any time and it will not affect the current state of the light. If the light is in *STANDBY* mode the light will turn on as shown below and revert to *STANDBY* mode after the diagnostic has been completed.

- 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 radio light within range of the control unit will now turn on.



Maintenance and Servicing

Designed to be maintenance free the AV-FL-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-FL-RF-SOL and ensure all terminals are clear of foreign matter.

Replacing the Battery in AV-FL-RF-SOL

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

- a. Undo latches and open lid of the solar power unit.
- b. Undo battery clamp and detach battery leads.
- c. Remove battery from AV-FL-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 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-FL-RF-SOL Long Term Battery Storage

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

- The SLA batteries inside the AV-FL-RF-SOL must always be stored in a fully charged state.
- Disconnect 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">• Ensure internal battery connector in the AV-FL-RF-SOL is connected• Ensure battery is properly connected• Ensure battery voltage is above 12volts.
<i>Radio Controller will not turn on.</i>	<ul style="list-style-type: none">• Recharge the battery. The unit can be left attached to the charger for a constant battery charge.



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

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



Helipad Lighting



Obstruction Lighting



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



Head Office

Avlite Systems
11 Industrial Drive
Somerville, Vic 3912
Australia

Tel: +61 (0)3 5977 6128
Fax: +61 (0)3 5977 6124

Email: info@avlite.com
Internet: www.avlite.com

A subsidiary of Sealite Pty Ltd www.sealite.com