SL-15

Installation and Service Manual

Solar Marine Lantern 1 - 2NM+
with Adjustable Flash Settings

Version 4.0

SPX AIDS TO NAVIGATION

SEALITE

We Believe Technology Improves Navigation

Manual Update Register

Version No.	Description	Date	Approved	Design
4.0	Add Bluetooth and Sealite Pro	June 2023	M. Nicholson	M.Sharp

Contents

1.0 Introduction

Congratulations! By choosing to purchase a Sealite lantern you have become the owner of one of the most advanced LED marine lanterns in the world.

Sealite Pty Ltd has been manufacturing lanterns for over 25 years, and particular care has been taken to ensure your lantern gives years of service.

As a commitment to producing the highest quality products for our customers, Sealite has been independently certified as complying with the requirements of ISO9001:2015 quality management system.

Sealite lanterns comply with requirements of the US Coast Guard in 33 CFR part 66 for Private Aids To Navigation.

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

2.0 Operating Principle

The solar module of the lantern converts sunlight to an electrical current that is used to charge the battery. The battery provides power to operate the lantern at night.

The flasher unit has very low current requirements. A microprocessor drives an ultra bright LED through a DC/DC converter, which enables the LED's to operate within the manufacturer's specifications. The battery is protected from over-charging within the circuit to ensure maximum battery life.

On darkness, the microprocessor will initiate a program check and after approximately 1 minute begin flashing to the set code.

3.0 Technology

Sealite is the world's fastest growing manufacturer of marine aids to navigation. We employ leading mechanical, optical, hardware and software engineers to create innovative products to service the needs of our customers worldwide, and offer the widest range of solar-powered LED lanterns in the marketplace.

3.1 Electronics

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

3.2 LED Technology

All marine lanterns 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.

3.3 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 Sealite products are of a consistent & superior quality.

3.4 Optical Performance

Sealite manufactures a range of marine LED lenses moulded from multi-cavity dies. Complex shapes such as the SL-70, BargeSafe™ and 16-segment multi-focus lenses are a testament to the company's superior in-house lens manufacturing capabilities and outstanding optical performance.

3.5 Award-winning, Patented Technology

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

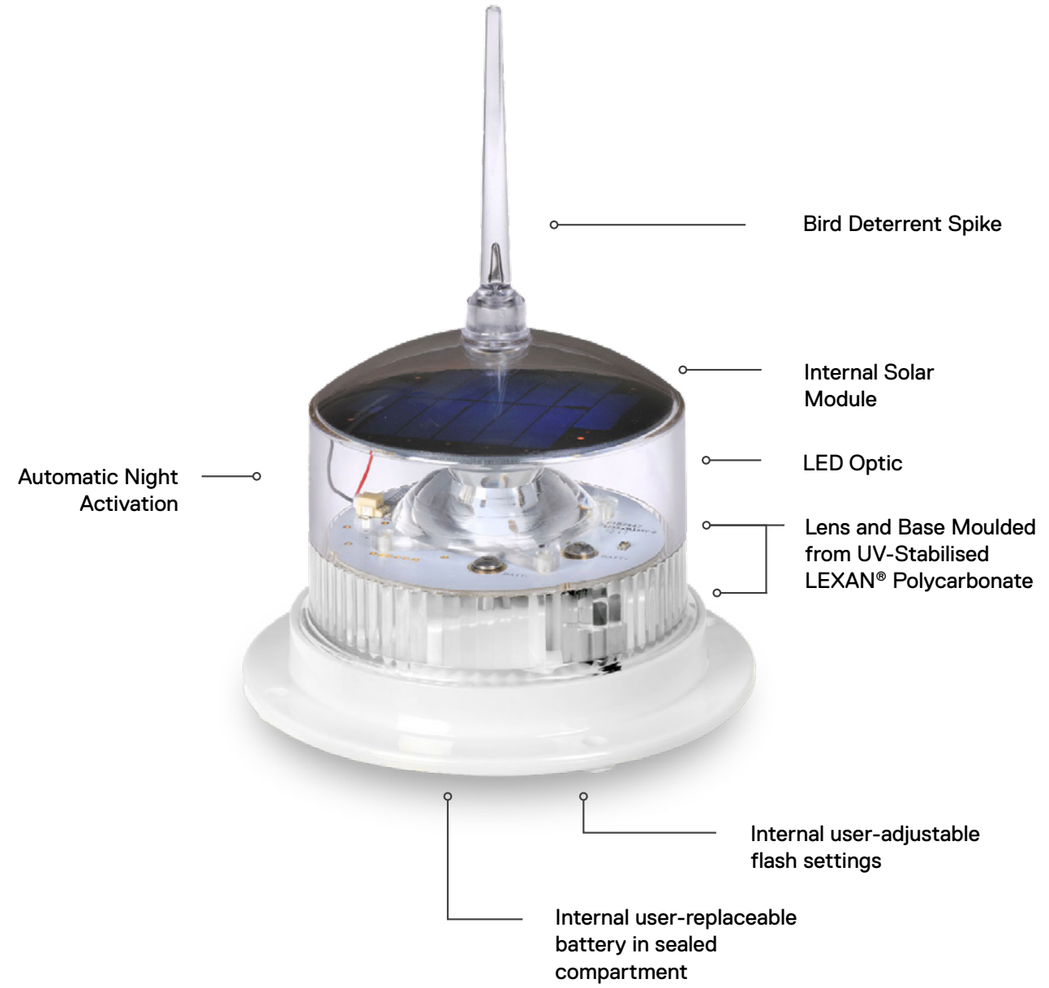
4.0 SL-15 Series

The Sealite SL-15 1–2NM+ LED compact light incorporates some of the most advanced technology available. Made from tough, durable polycarbonate and using the latest high-intensity LEDs, no expense has been spared in the design and development of this lantern.

Installation takes just minutes, and a permanent ON/OFF, accessible through the battery compartment, switch allows for easy storage. The SL-15 is designed to be maintenance-free and have a service life of over 3 years.

4.1 Key Features

- User-adjustable flash characters;
- User-replaceable battery in sealed battery compartment;
- Installs in minutes and operates maintenance-free for up to five (5) years;
- Completely sealed and self-contained using advanced UV-sealing;
- IP68 waterproof;
- NiMH battery for long service life and wide temperature range; and
- Solar Powered.



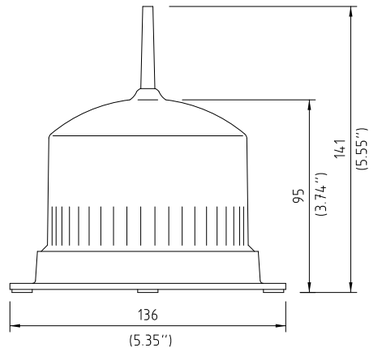
4.2 Technical Data Sheet

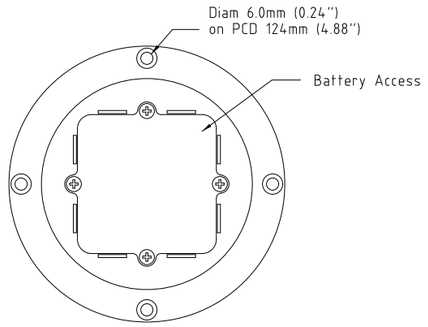
SL-15	
Light Characteristics	
Light Source	High Efficiency LED
Available Colours	Red, Green, White, Yellow, Blue
Typical Maximum Intensity (cd)†	Red - 6.2, Green - 7.6, White - 6.8, Yellow - 5.9
Visible Range (NM)	AT @ 0.74: 1 – 2+ AT @ 0.85: 1.1 – 2.3+
Horizontal Output (degrees)	360
Vertical Divergence (degrees)	7
Reflector Type	Single LED Optic
Available Flash Characteristics	16 user-adjustable IALA flash characteristics (other flash patterns available on request)
Intensity Adjustments	32 automatic step-down settings based on power demand of flash code selection
LED Life Expectancy (hours)	>100,000
Electrical Characteristics	
Current Draw (mA)	Refer to Sealite Power Calculator
Circuit Protection	Integrated
Nominal Voltage (V)	3.6
Autonomy (days)	>50 (14 hour darkness, 12.5% duty cycle)
Temperature Range	-40 to 80°C
Solar Characteristics	
Solar Module Type	Monocrystalline
Output (Watts)	0.75
Power Supply	
Battery Type	High grade NiMH
Battery Capacity (Ah)	2.4
Nominal Voltage (V)	3.6
Physical Characteristics	
Body Material	LEXAN® Polycarbonate – UV-stabilised
Lens Material	LEXAN® Polycarbonate – UV-stabilised
Lens Diameter (mm/inches)	98 / 3 7/8
Lens Design	Single LED Optic
Mounting	4 x 6 mm mounting holes
Height (mm/inches)	141 / 5 1/2
Width (mm/inches)	136 / 5 3/8
Mass (kg/lbs)	0.5 / 1 1/8
Product Life Expectancy	Up to 12 years^
Compliance	
CE	EN61000-6-1:2007. EN61000-6-3:2007
IALA	Signal colors compliant to IALAE-200-1
Quality Assurance	ISO 9001:2015
Ingress Protection	IP68
Intellectual Property	
Patents	US Pat. No. 6,667,582. AU Pat. No. 778,918
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd
Warranty^	3 years
Options Available	• Bluetooth® • ON/OFF switch • Custom flash patterns • 50 mm pole mount adapter plate

CE

· Specifications subject to change or variation without notice
* Subject to standard terms and conditions
† Intensity setting subject to solar availability
^ Refer to the Sealite website under the warranty section

4.3 Technical Drawing





5.0 Installation

Charging the Battery

New lanterns should be **left in the sun for 1-2 days** to ensure battery is charged before placing in service.

Please note, lantern will re-charge even when switch is turned to '**OFF**' position.

Preferred Installation Location

For best lantern performance, ensure solar modules are not covered and are in clear view of the sky with no shadows.

1. The SL-15 will be supplied preset to the requested flash code.
2. The light can be directly positioned in your desired location.
   Secure it, utilising the 4 x holes in the flange.
   Ensure the light is bolted to an even, flat surface.

6.0 Flash Codes

6.1 Adjusting the Flash Code

1. Remove the **4 x battery cover screws** and lift the cover and battery out of the compartment to expose the adjustment plug.
2. Unscrew the **adjustment plug**.
3. Using a **small flat bladed screwdriver** adjust the Flash Code to the desired setting.

4a. Cover the light, in darkness, for at least 30 seconds to activate the light sensor. Make sure the light is flashing correctly.

4b. Uncover the light and wait at least 30 seconds to make sure the light turns off in daylight.

5. Insert the adjustment plug and replace the battery.
6. Replace the cover and secure using the 4 x screws. **Do Not** over tighten screws.
7. Position the light in your desired location and secure, utilising the 4 x holes in the flange.
Note: Ensure the light is bolted to an even, flat surface.

6.2 Flash Code Table

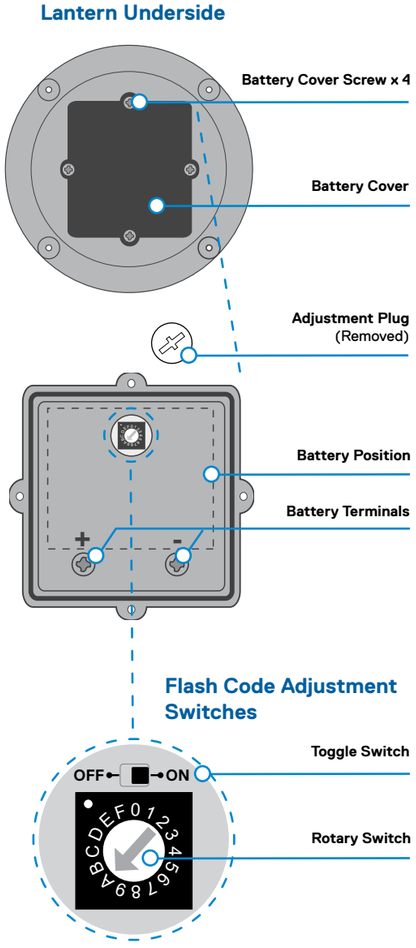
Switch Position	Flash Setting		Duty Cycle (%)
	On (sec)	Off (sec)	
0	Steady On		100
1	0.5	1.0	33
2	0.5	3.5	12.5
3	1.0	3.0	25
4	0.5	5.5	8.5
5	0.3	0.7	30
6	0.3 (On), 0.7 (Off), 0.3, 0.7, 0.3, 0.7, 0.3, 15.7		6.5
7	0.3	1.7	15
8	0.3	2.2	12
9	0.5	2.0	20
A	0.3	2.7	10
B	0.5	2.5	16.5
C	0.7	2.3	23.5
D	0.5	4.5	10
E	1.0	4.0	20
F	Custom Flash Code Position - (on request)		

6.3 Selecting an Intensity/Power Setting

Using the latest technology in software, the SL-15 automatically adjusts the Intensity Setting when Flash Code is set.

6.4 Selecting a Flash Code- Rotary Switch

All SL-15 Lights are fitted with a rotary switch. Turning the small arrow to the appropriate number or letter will set the code (see '**7.1 Flash Code Table**' below). The unit may take up to one minute to activate a new flash code.



7.0 Maintenance and Servicing

Designed to be maintenance free, the SL-15 requires minimal attention, though the following maintenance and servicing information is provided to help ensure the life of your Sealite product.

1. 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.
2. Battery Check - inspection of batteries should be performed every two years (minimum) to ensure that the charger, battery and ancillary electronics are functioning correctly. Using a voltage meter, check that the battery voltage is at least 3.6 volts under 50 mA load, and ensure all terminals are clear of foreign matter.

7.1 Replacing the Battery

The SL-15 lantern is the only compact marine lantern with a double sealed battery compartment. This provides the user with the ability to change the battery after years of operation.

1. Remove the 4 x battery cover screws and lift the cover and battery out of the compartment to expose the adjustment plug
2. Unscrew the adjustment plug.
3. Use a small flat bladed screwdriver to turn unit OFF.
4. Unscrew positive and negative battery leads.
5. Discard old battery in a safe manner. Please remember to recycle where possible.
6. Reattach positive and negative leads to new battery and then place back into case.
7. Switch lantern 'ON' via internal switch.
8. Cover the light, in darkness, for at least 30 seconds to activate the light sensor. Make sure the light is flashing correctly.
9. Uncover the light and wait at least 30 seconds to make sure the light turns off in daylight.
10. Insert the adjustment plug and replace the battery.
11. Replace the cover and secure using the 4 x screws.

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 discard old batteries in a safe manner.

7.2 Long Term Storage Instructions (>4 weeks)

If light is required to be stored for longer than 4 weeks, please turn the light off using the internal ON/OFF switch (and external ON/OFF switch where fitted).

1. Remove the 4 x battery cover screws and lift the cover and battery out of the compartment to expose the adjustment plug
2. Unscrew the adjustment plug.
3. Using a small flat bladed screwdriver switch the ON/OFF switch to the OFF position.
4. Insert the adjustment plug and replace the battery.
5. Replace the cover and secure using the 4 x screws. Do Not over tighten screws.
6. Repeat these steps to re-activate your light when it is removed from storage.

When fitted with the optional **External ON/OFF** switch, for correct operation of the **External** switch, the **Internal** switch must be set in the **OFF** position.

If the **Internal** switch is set to the **ON** position, the operation of the **External** switch is bypassed and the lantern is **ON**.

All batteries will discharge over time and the rate of discharge is dependent on temperature. If the lantern is being stored in temperatures greater than 40°C the battery will discharge faster.

Please check battery every 3-6 months and recharge if necessary.

8.0 Troubleshooting

Problem	Remedy
Lantern will not activate	• Ensure internal toggle switch is set to the 'ON position. • Ensure lantern is in darkness. • Wait at least 60 seconds for the program to initialise in darkness. • Ensure switch setting is on a valid code (See '7.1 Flash Code Table' section of this manual). • Ensure battery terminals are properly connected. • Ensure battery voltage is above 3.4 Volts.
Timing codes will not change	• Turn rotary switches several times to ensure contacts are clear.
Lantern will not operate for the entire night	• Expose lantern to direct sunlight and monitor operation for several days. Sealite products typically require 1.5 hours of direct sunlight per day to retain full autonomy. From a discharged state, the lantern may require several days of operational conditions to 'cycle' up to full autonomy. • Reducing the light output intensity or duty cycle (flash code) will reduce current draw on the battery. • Ensure solar module is clean and not covered by shading during the day.
Lanterns are constantly on during the day	• Ensure the flash code is not set to FF. This flash code is for testing purposes only and will be steady on for 24 hours a day.

9.0 Programming the Lantern

SealitePro® Bluetooth Guide

The SealitePro® application is used to communicate with Sealite lighting products that have Bluetooth technology fitted. The Bluetooth control offers the following main functionality:

- Lantern Information.
- Lantern Status.
- Solar Calculations.
- Programming Options.
- Power Monitoring.
- Manufacturing Data.
- Advanced Operations.

The SealitePro® Application is available on both Android and iOS devices. Most functions between platforms are identical and the majority of the screenshots in this manual where taken showing an iOS device screen. Where the Android device differs, both visual options have been provided.

Bluetooth® Controller Functions

The Sealite SL-C510 with AIS Bluetooth® Control System accessible via the SealitePro® App is divided into seven simple sections as outlined below and displayed on the App home screen.

Lantern Information
- Lantern Identification
- Lantern Type
- Lantern Name
- Bluetooth Authentication
- Lantern Colour
- Lantern Peak Intensity
- Lantern Battery Option

Lantern Status
- Battery Voltage
- Status Flags
- Lantern Geolocation

Solar Calculations
- Solar Calculator Options
- Solar Charge
- Autonomy

Programming Options
- Operating Mode
- Flash Code
- Intensity
- Sync Offset
- GPS Mode
- Hibernation
- Lux Level
- GSM Power

Power Monitoring
- Load Current
- Load Current – Last Hour
- Load Current – Yesterday
- Charge Current
- Charge Current – Last Hour
- Charge Current - Yesterday

Manufacturing Data
- Hardware
- Board Serial Number
- Manufacture Date
- Software Version

Advanced Operations
- Test LED
- Perform Factory Reset

9.1 Accessing the SealitePro® App for the first time

Opening the SealitePro® App on an Android or iOS Device

Download the SealitePro® App from Google Play (search for "Sealite" in the store) on an Android Tablet or Smartphone or via the App store on an iOS tablet or phone. Open the App to prompt the Sealite Bluetooth control system.

Start Menu

- Connect via Bluetooth® - connect to a lantern.
- Support Tools - Solar Calculator to conduct simulations based on lantern settings and locations.

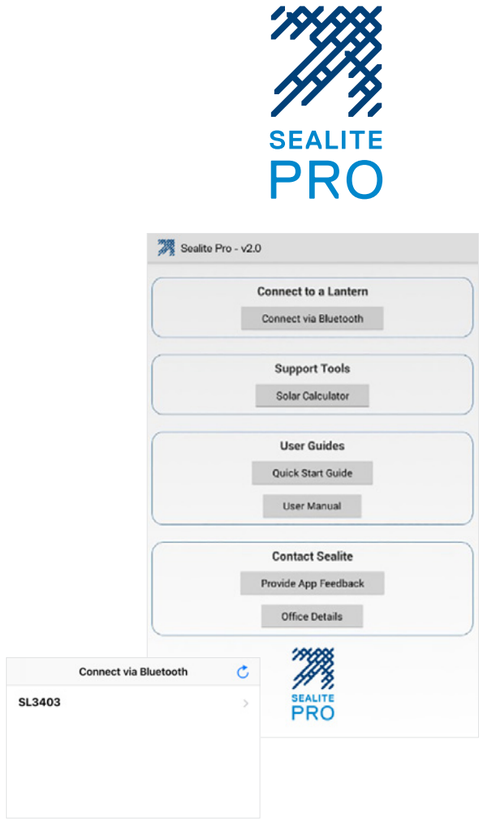
NOTE: This feature provides lantern simulations only in regard to battery autonomy on solar radiation. Changes may be applied through "Connect via Bluetooth" option only.

- User Guides – Quick Start Guide and User Manual.
- Contact Sealite/Us – Provide product feedback and contact Sealite.

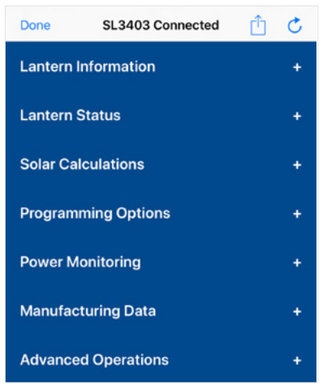
Scan for Lanterns

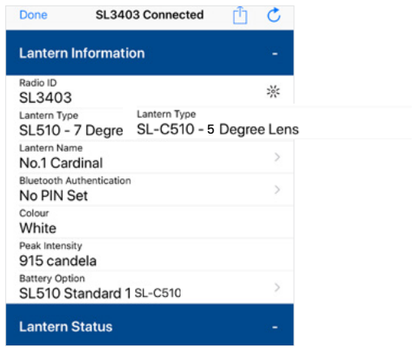
When the "Connect via Bluetooth®" option is selected, the App will automatically scan for lanterns equipped with Bluetooth® within range.

- Select the lantern which requires setting or verification.



Expand the "Lantern Information" section if collapsed.



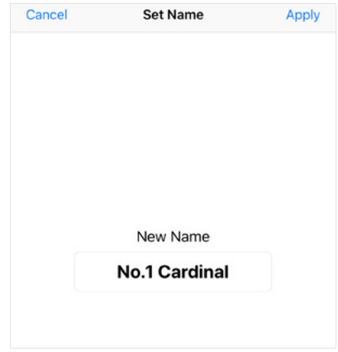


9.2 Identify Bluetooth® Radio ID

When "Identify" on the Tablet or phone is selected, the connected lantern will flash quickly (10 times). For iOS, identify is represented by a flash / burst icon.

Set the Lantern Name

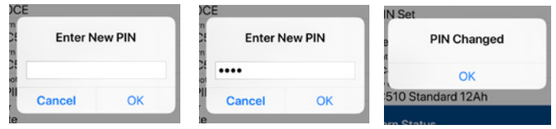
1. Press "Name" to change the lantern name. A user defined name, comprising up to 16 alpha- numeric characters (and -, $, # @) can be typed into the dialogue box. It is recommended that the lantern be programmed with a unique name.
2. Press apply and then Set to confirm.



Create Security Access PIN

The factory default does not set the lantern with a Security PIN.

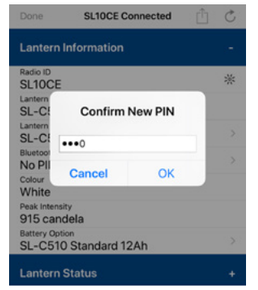
3. To set a PIN, select "Authentication Level" ("Bluetooth® Authentication for iOS") then enter a New PIN and press "OK". A confirmation of the PIN will be prompted.
4. Re-enter the same PIN and press "OK".



Modify Current Security Access PIN

5. To set a new Security Access PIN select "Authentication Level" ("Bluetooth® Authentication for iOS") and type the current Security PIN.
6. After validation the App will request for the current PIN to be re-entered. After confirmation enter the new Security PIN then confirm the new PIN.

Note: If the Security PIN is lost, see Password Reset Procedure. Also note that PIN '0000' is reserved and will result in the lantern having no PIN.



9.3 SealitePro® Password Reset Procedure

In the event where the password set is unknown the procedure below should be followed:

Step 1 – Disconnect the power supply from the light head

(a.) Remove the four socket-head screws on the top of the lens assembly and lift the SL-C510 (lantern head) assembly from the solar chassis;

(b.) Disconnect the 4-Pin connector that joins the battery to the light head, then immediately re-connect the battery and the lantern again.

Step 2 – Connect to the lantern using the SealitePro®

Once the light head and battery are re-connected ensure the following procedure is conducted within one minute. Otherwise the process at step 1 will need to be completed.

(a.) Connect to a lantern by pressing "Connect via Bluetooth®";

(b.) Select a lantern displayed on the "Connect via Bluetooth®" screen;

(c.) Expand the "Lantern Information" drop down menu then press select "Authentication Level" ("Bluetooth Authentication for iOS").

NOTE: If "User Authenticated" under "Authentication Level" or Bluetooth Authentication appears the limited time that allows to modify the PIN has expired.
Therefore, start the process again at Step 1;

(d.) If "No PIN Set" appears under Authentication Level, please press Change PIN;

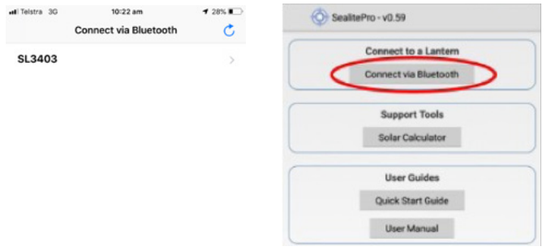
(e.) Enter a New PIN and press "OK". A prompt to confirm PIN will appear. Re-enter the same PIN; and

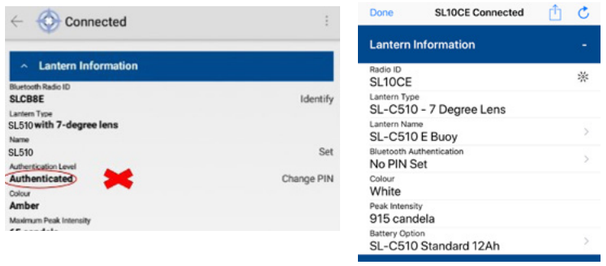
(f.) press "OK".

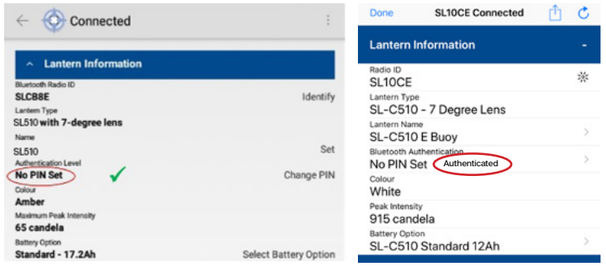
(g.) One the procedure is complete, ensure the 4 socket head screws are replaced to secure the light head; and

(h.) solar chassis.

Where screens are shown side by side, the left is an Android devices and the right is an iOS devices.



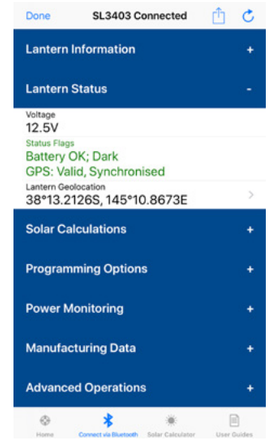




9.4 Lantern Status

From the "Lantern Status" section the user can verify the current lantern status

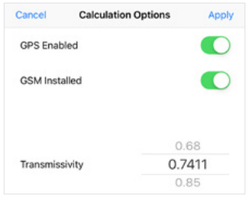
- **Colour Menu**
  Displays the lantern colour
  (White, Red, Green, Blue or Yellow).
- **Peak Intensity Menu**
  Displays the Lantern Maximum Intensity in candelas (cd) based on the LED Colour.
- **Battery Option**
  This section displays the battery size capacity in Ampere hour (Ah) and is configurable.
- **Voltage**
  The battery health status.
- **Status**
  Displays the battery health status, the current light sensor state and if the GPS is enabled, synchronised or off station. Any warning states will cause the status to be shown in amber or red.
- **Lantern Geolocation**
  Displays the lantern coordinates and allows the location to be plotted on a map.



9.5 Solar Calculations

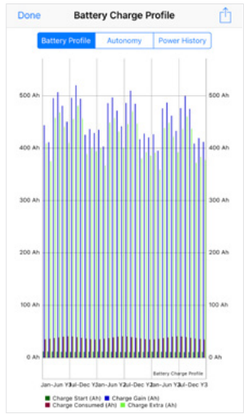
This function estimates the lantern autonomy based on the lanterns current settings and geolocation.

- **Solar Calculator Options**
  The SL-C510 with AIS has options to be fitted with SATCOM and GSM modules to allow multiple lanterns synchronisation and monitoring. The SealitePro® App offers the user the option to modify the GPS and GSM by enabling or disabling the operation. In addition, it offers different levels of transmissivity conditions for accurate solar calculations.

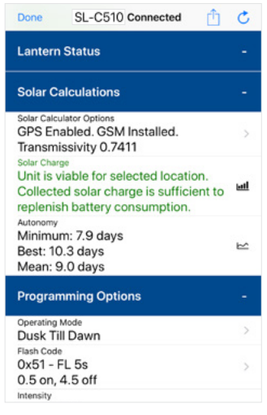


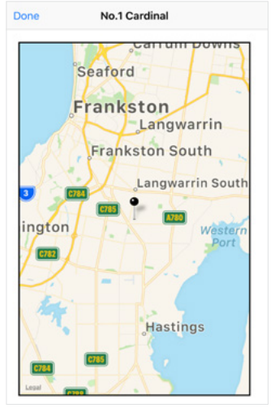
- **Solar Charge**
  This function estimates whether the collected solar charge is sufficient to replenish battery consumption and will indicate if the unit is viable for the selected location.

- **Autonomy**
  This function estimates the lantern autonomy based on the lantern settings and geolocation.

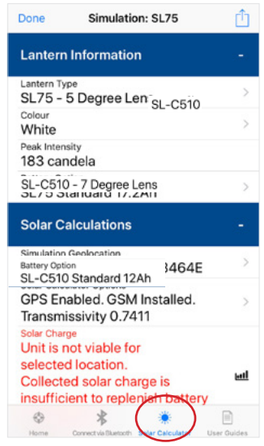


- **Option 1**
  Use the current GPS location to establish the lantern autonomy.





- **Option 2**
  An alternate method for setting the calculator is by using the "Solar calculator" function. Select your product from the option(s) available, then select "Simulation Geolocation".



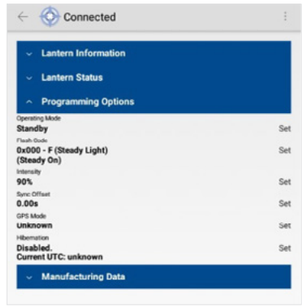
- **Set Autonomy Location**
  Select a location globally to estimate the lantern autonomy if installed at that location.

  The autonomy will be shown in amber or red if the configuration is not recommended.

9.6 Programming Options

Operating Mode

To change the Operating Mode, press the Operating Mode field and then select one of three available options:



- **Standby**
  The lantern is configured in a minimum current state in which the LEDs are always off and the internal GPS is disabled.
- **Always On**
  The daylight sensor is disabled, and the lantern operates according to the set flash character and intensity levels.
- **Dusk till Dawn**
  The daylight sensor is monitored, and the lantern will only operate at night time.

Once the Operating Mode is selected press “Set / Apply“ to confirm the change. As factory default the lantern is always set to Dusk till Dawn mode.

9.7 Flash Code

Sealite marine lanterns may be set to any of the 256 IALA recommended flash characters which are user-adjustable on site. SEALITE® code reference is listed by the number of flashes.

For the latest version of this document visit **sealite.com** or email **info@sealite.com**

Symbols

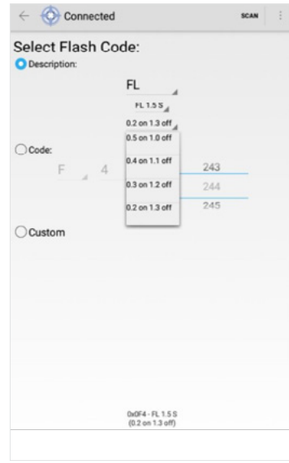
FL	Flash followed by number Eg. FL 1 S, one flash every second
F	Fixed
Q	Quick Flash
VQ	Very Quick Flash
OC	Occulting; greater period on than off
ISO	Isophase; equal period on and off
LFL	Long Flash Long
MO	Morse code ( ) contains letter

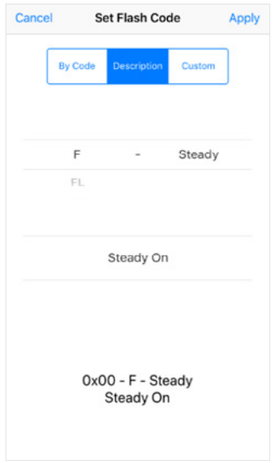
To start the Flash Code settings press on the Flash Code field

There are three ways to modify the lantern Flash Code

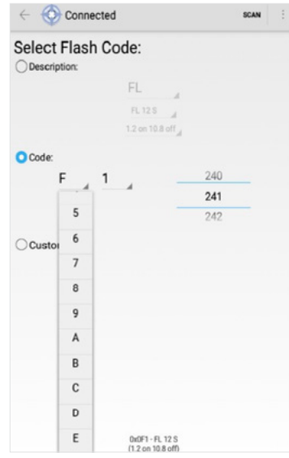
1. **Description**
   Modify the Flash Code by selecting the type and length (on/off) of the flash. Once the Flash Code is established press “Set / Apply” to confirm the change.

Note: The number of flashing combinations are limited, for more information please check the Sealite Flash Code table provided in the Appendix Section.



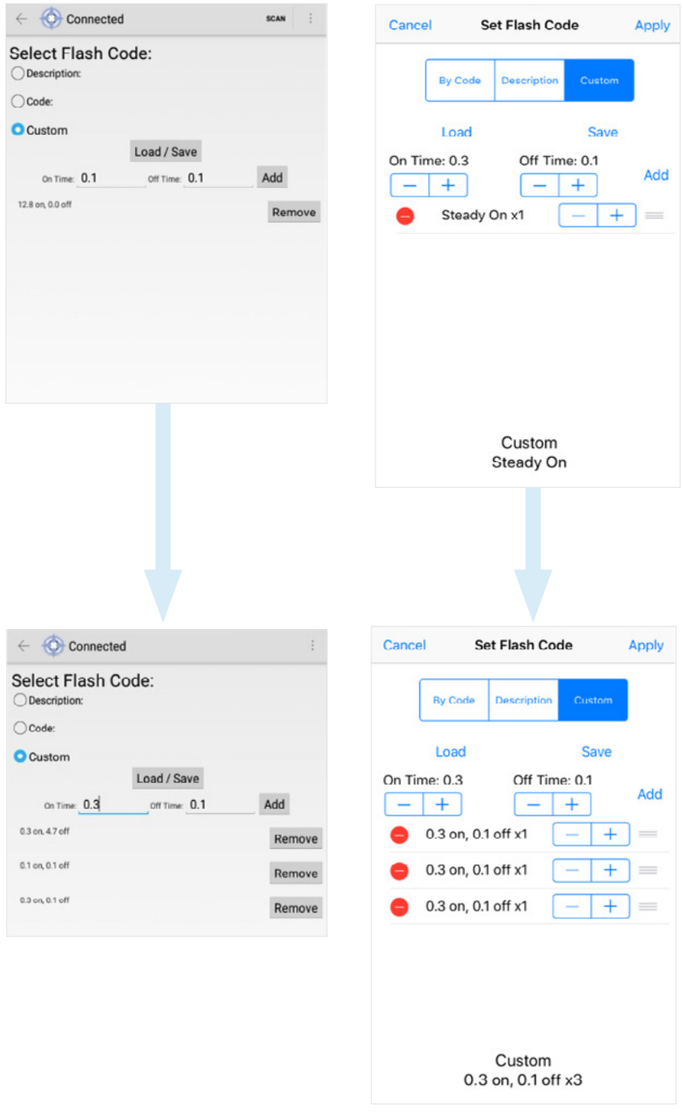


2. **Code**
   Select the Flash Code from the Sealite Flash Code table provided in the Appendix section. Once the Flash Code is established press “Set / Apply” to confirm the change.



Custom

Create sequences of custom Flash Codes by nominating the on/off times. Once the Flash Code is established press “Set /Apply” to confirm the change. To add multiple flashing configurations, press “add” for each configuration.



Intensity

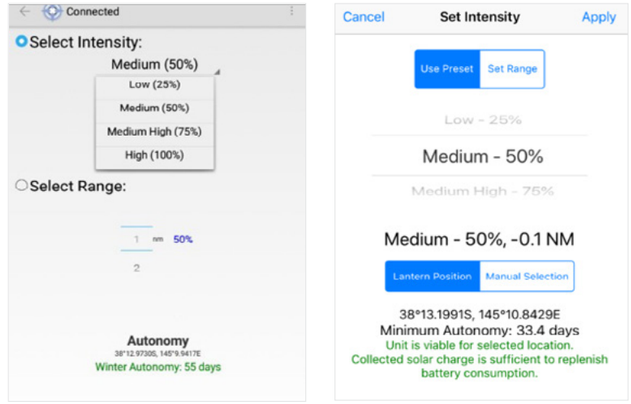
The lantern intensity level can be set by either defining the operating range of the lantern (in nautical miles) or by entering the available percentage intensity level.

When Schmidt Clausen is applied, the lantern will automatically adjust the intensity level based on the entered range and Flash Code setting. The intensity level is automatically adjusted each time a new range is set.

Note: This does not apply for changing Flash Code - the user must re-set the intensity.

Select Intensity

Choose one of four intensity values:
25%, 50%, 75% or 100%.

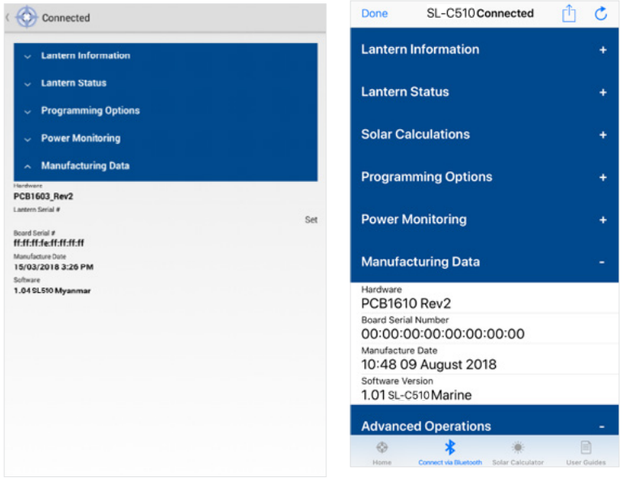


10.0 Manufacturing Data

When connected via Bluetooth, data about the lantern hardware will appear on the “Manufacturing Data” tab.

From this drop-down tab the user will be able to verify the information that identifies the lantern’s internal electronic hardware and firmware versions.

Moreover, the Lantern Printed Circuit Board Serial number is identified.



10.1 Let's try a practical example

If Bluetooth connection is established, data about the lantern battery charge and load current will appear on the "Power Monitoring" tab. From this drop-down tab the user will be able to verify the amount of battery charge that the lantern was able to capture in the previous 24 hours. In addition, the information of load current through the system can be monitored.

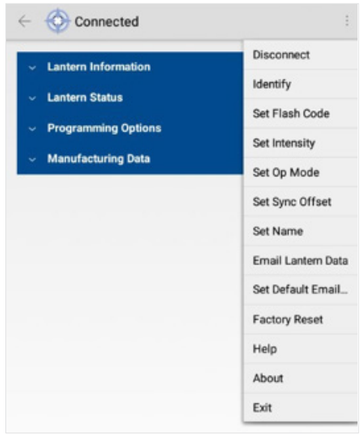
10.2 Quick Access Tab

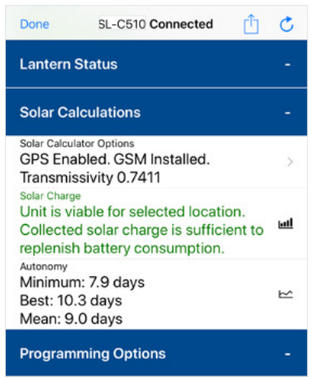
The SealitePro® App also allows a quick access tab offering the user access to the main setting functions of the lantern, applicable to Android devices only.

By touching the menu button, a drop down menu will pop showing the setting functions available.

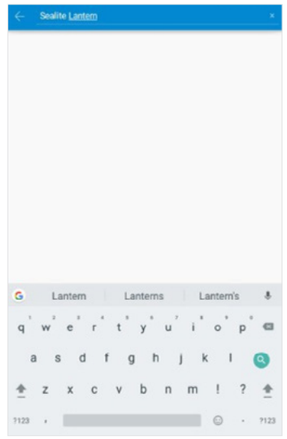
In addition, the quick access tab offers other additional functions:

- **Disconnect**
  By touching "Disconnect" it will automatically disconnect the control device from the lantern.
- **Email Lantern Data**
  This function allows to send the lantern configuration and status via email.
- **Email Lantern Data**
  This function allows to send the lantern configuration and status via email.



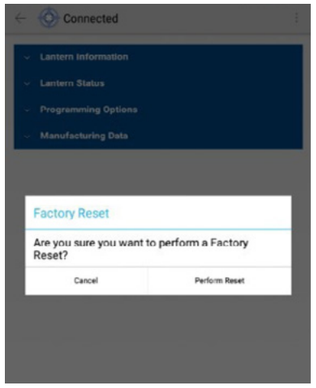


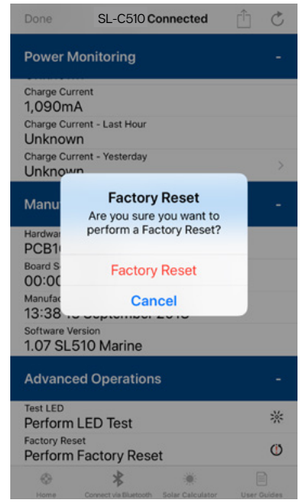
Set Default Email* Note Android only
This option allows to search for an existing contact on the device to use as the default recipient of configuration and status emails.



Factory Reset
This feature will reset automatically all previously lantern settings to a Factory Reset. If the option is selected, a confirmation message will display to confirm.
Select "Perform Reset" to confirm the reset.

Note: Applying the Factory Reset will also reset the Security Pin if one was set by the user.





11.0 Sealite Pro Troubleshooting

Questions	Answers
Can you use the Solar Calculator under "Support Tool" to verify a Lantern Autonomy then set the lantern configuration from there?	No. The actual lantern settings can only be performed through "Connect via Bluetooth". Any solar calculation simulation performed under support tools, can be reflected on the actual lantern settings.
Do I need to create a PIN when I first start using the lantern?	No. The lantern will operate without setting a Security PIN. However, it is highly recommended by Sealite for customers to set a unique PIN from the moment the lantern starts to operate.
When I try to download SealitePro® from Google Play, I see the message "Device not compatible".	SealitePro® may not be installed on an Android device running Ice Cream Sandwich (version 4.0.4) or lower. The Google Play store will stop you from attempting to install SealitePro® if your device is incompatible. SealitePro® requires a device running Android KitKat (version 4.4) to communicate with Sealite Bluetooth lanterns. SealitePro® may be installed on devices running Android Jelly Bean (version 4.1-4.3) however, the 'Connect via Bluetooth' option will not be available.
I have installed SealitePro®, but the 'Connect via Bluetooth' option is disabled.	SealitePro® requires a device equipped with Bluetooth 4.0 or above. If no Bluetooth device is detected, the 'Connect via Bluetooth' option will be disabled. SealitePro® also requires a device running Android KitKat (version 4.4) to communicate with Sealite Bluetooth lanterns. If SealitePro® is installed on a device running Android Jelly Bean (version 4.1-4.3) then the 'Connect via Bluetooth' option will not be available.
When I start SealitePro® , I see the message "Bluetooth Permissions Denied. Please enable all permissions. Go to Settings?'	SealitePro® requires permission from Android to access various features of the mobile device, such as use of the Bluetooth module. Some versions of Android enforce these permissions to be granted when SealitePro® is installed. Later versions require the user to manually grant these permissions. If the message above is shown, then the latter scenario has occurred. Please answer 'Yes' to the prompt and SealitePro® will attempt to open the 'Settings' page. A list of installed Apps should appear. Find SealitePro® in the list and press it. At the bottom of the screen should be an 'App permissions' section. Click on this and enable all permissions presented. Then press the 'Back' button until SealitePro® reappears. If the above process does not open the 'Permissions' settings correctly, this will have to be performed manually. Return to the device home screen, then open the 'Settings' App and select 'Installed Apps'. Select SealitePro® from the list and follow the instructions above. Please consult your device user guide to find out how to access and grant App permissions if the settings cannot be found.
When I press 'Connect via Bluetooth', I see the message 'An App/ SealitePro® wants to turn on Bluetooth'.	Connecting to a lantern via Bluetooth requires that the mobile device has Bluetooth turned on. If this message appears it is because the device's Bluetooth module is turned off. Press 'Allow' and SealitePro® will attempt to turn the Bluetooth device on. If required, you may turn Bluetooth off when finished through the device's 'Settings' App. If you press 'Deny' then connection will be cancelled.
When I select 'Connect via Bluetooth', the device performs a scan but tells me that no lanterns were found.	Several conditions may occur that will prevent lanterns from being discovered. 1. Verify that a Bluetooth-equipped Sealite lantern is nearby and powered on. 2. Verify that no other mobile device is connected to the lantern via Bluetooth. Bluetooth supports only one connection at a time, therefore if another device is connected it must be disconnected before the lantern appears in a scan result. 3. Turn the Bluetooth feature of the mobile device off and on again. This may be performed through the Android Notification Bar of some devices or through the Settings App. See your device user manual for full instructions. 4. Some Android devices require Location Services to be enabled before they will 'see' Bluetooth lanterns. Location Services may be enabled through the Android Notification Bar of some devices or through the Settings App. See your device user manual for full instructions. 5. Turn the lantern off and then on again. 6. Ensure your device is within its Bluetooth range. If the problem persists, please contact Sealite for assistance.
I have connected to a lantern via Bluetooth, but the message "Lantern Comms Failure. Retrying..." keeps appearing.	Try disconnecting from the lantern, then rescanning and connecting. It is possible that the lantern is at the edge of the Bluetooth range, or maybe the data connection is unreliable. If the problem persists, please contact Sealite for assistance.

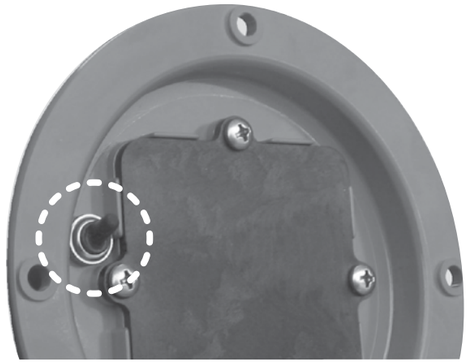
12.0 Optional ON / OFF Switch

12.1 ON/OFF Switch (SL-15-SW)

An optional external ON/OFF switch can be installed on request (additional charges will apply).

For correct operation of the EXTERNAL switch, the INTERNAL switch must be set in the OFF position.

If the INTERNAL switch is set to the ON position, the operation of the EXTERNAL switch is bypassed and the lantern is ON.



13.0 SL-15 Accessories

MC/02
Post mounting plate to suit standard base SL-15
50mm ID

MC/04
Post mounting stand 50 mm OD post, 3-hole 200 mm OD base pattern

MC/05
90 degree wall mounting stand
50mm OD

MC/09
Buoy mounting plate to affix SL-15 lantern to:
SL-B600,
SL-B610; and
SL-B700 buoys

14.0 Sealite LED Light Warranty

Refer to Sealite website:

sealite.com

Contact Us!

SPX
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