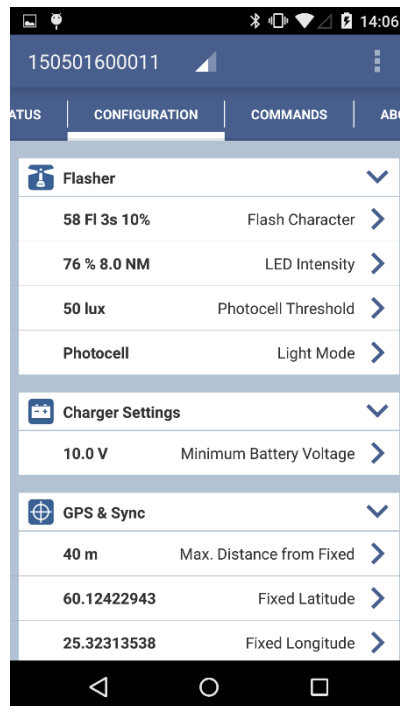


## Document revision history

Manual Revision	Date	Comments	Made by
1.2	18. jan 2021	Graphic update	Ruby
1.1	29. jun 2015	Trademark symbol added to Bluetooth®	JoL
1.0	25. jun. 2015	Editorial changes, first release	JoL
0.9	22. jun. 2015	First Draft	CHL



# Bluetooth<sup>®</sup> Control Application Product Manual

**Version: 1.2**  
**Date: January 15<sup>th</sup>, 2021**

Disclaimer: Every possible effort has been made to ensure the validity of this document. It represents the current view (as of the publishing date) on the functions and properties of the products mentioned in the document. SABIK OY is not responsible for possible typing errors. The pictures and drawings are for descriptive use only. The document may be updated or changed without notice.

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## 1. Introduction

The Product is designed for programming and controlling Sabik Bluetooth® enabled lanterns using a simple user friendly interface. The Android or iPhone app can be downloaded and installed to Bluetooth® 4.0 (Bluetooth® Smart) capable smart phone. The useable range between lantern and phone is usually more than 10m (the range is depending on type of lantern) and maximum up to 50m. The energy consumption of the Bluetooth® chip is very low. These instructions are for Android devices but the instructions for iPhone are very similar.

### Standard Features and requirements

The lantern settings can be read to your phone for monitoring purposes. If you have the access rights you also can make changes and send them to the lantern. You cannot store the settings on your phone.

The app requires a minimum of iPhone 4s or a Bluetooth® 4.0 (Bluetooth® Smart) capable Android phone with operating system 4.3 or higher.

## 2. Installation

### Download



The app can be downloaded from Apple (<http://store.apple.com>) or Google (<https://play.google.com>) for free. Observe, that you may have to register yourself before downloading. The app is free of charge.

### Installation

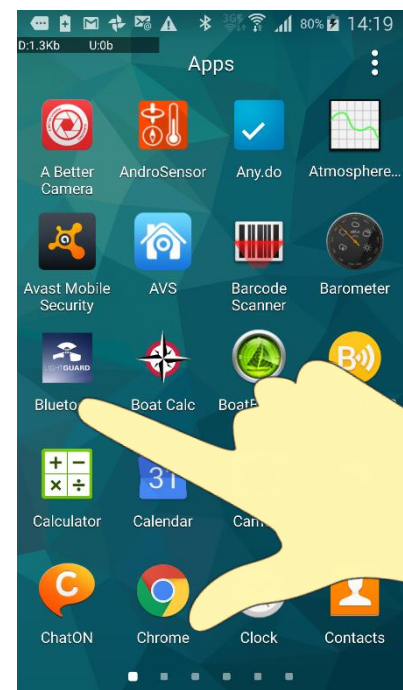
Follow the instructions on Google Play or Apple Store.

### Registration

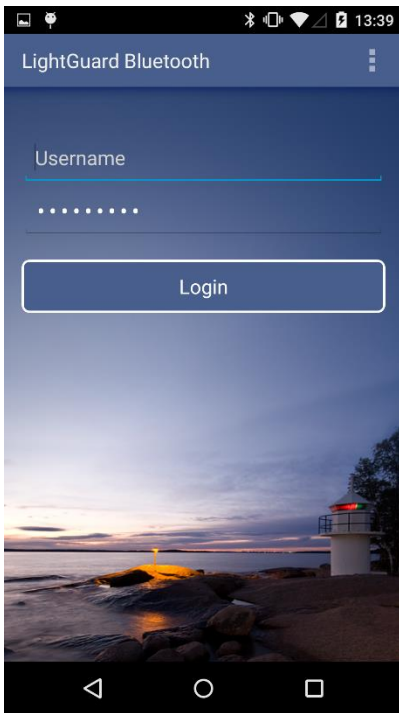
For the application to be able to work, you have to register your application using a valid user name and a password. Please contact your dealer to obtain these. This procedure has only to be done once.

## 3. Launching the application

After the installation you should find an icon for the Bluetooth® app. You may relocate it if necessary.



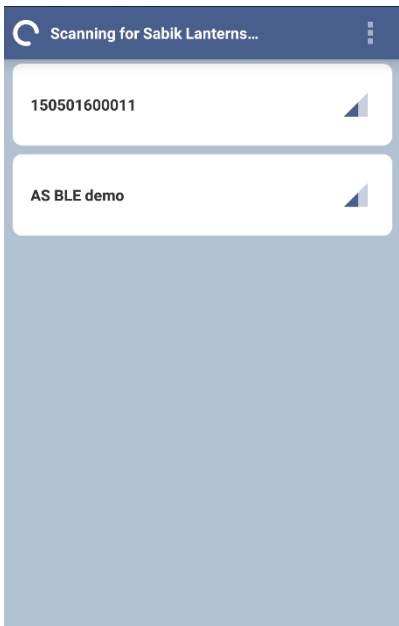
### 3.1. Login and selecting lantern



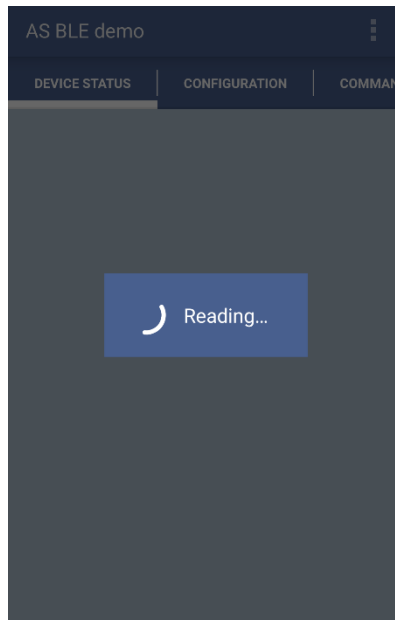
Fill in your user name and password and tap “Login”.

-if you don't have a user name and password, please contact your dealer to obtain these.

This information is stored in your device so the next time you will be logged in just by tapping the “Login” button

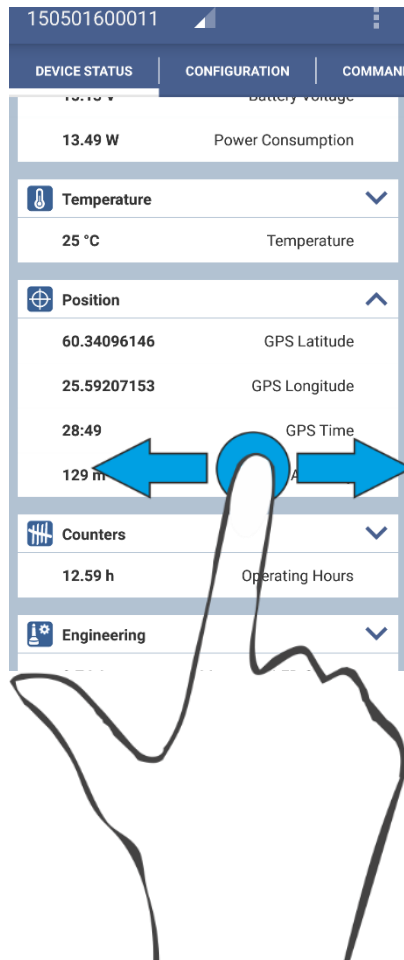


Now the app will search for Sabik lanterns within Bluetooth® range and display them in a list. Any lantern which is connected to another user will not be shown in the list. The lantern serial number is the default Bluetooth® name. This name can be changed using the application. This default serial number is also printed on the lantern. Tap on the name to select it.

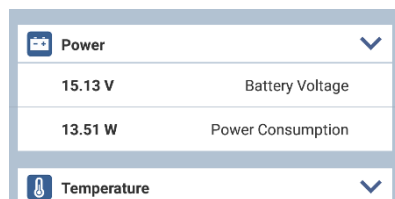


### 3.2. User interface


The interface labels are loaded from the lantern, so only the parameters relevant to this lantern are displayed. For instance, if there is no GPS function in the lantern, none are displayed in the application. The pages shows the standard settings.



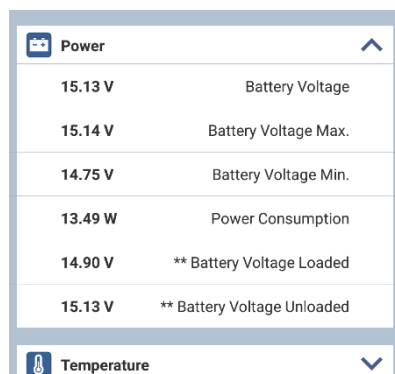
The user interface is divided into screens. (DEVICE STATUS, CONFIGURATION, COMMANDS and ABOUT) To select a screen, swipe the screen to the right or left or tap a screen tab.



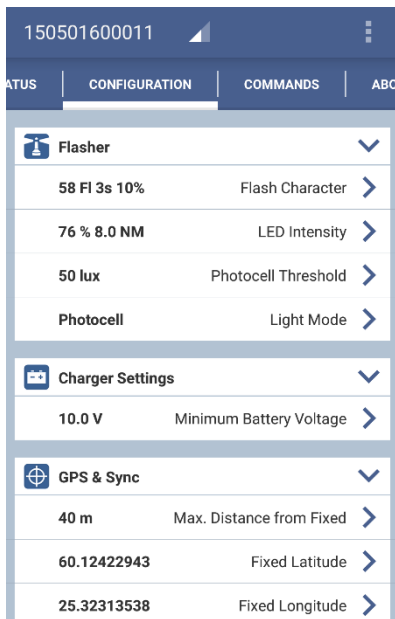
The Screens are divided into expandable blocks (Light, Power, Temperature etc.).

For advanced settings you have to expand the blocks. To expand a block just tap the  symbol near the right edge

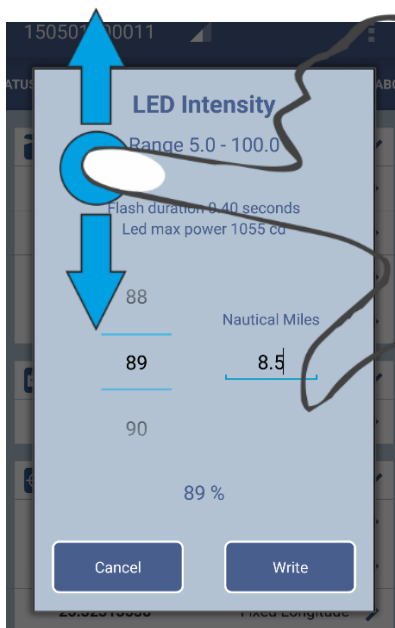
Expanded view for advanced settings. Tap the  symbol to collapse.



On the **CONFIGURATION** page you can change the lanterns configuration by tapping the small >-shaped symbol on the right side of the setting's name. If needed, expand the block to see the advanced settings.

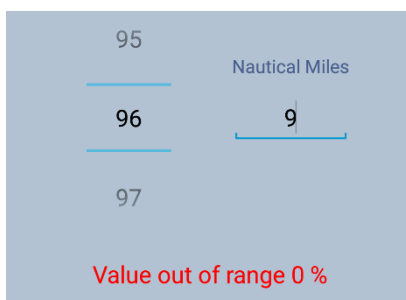


When, for example, LED Intensity is selected, you will be able to adjust the intensity by writing the range (in NM) or adjusting the intensity in percent. You can write the percentage or select it by swiping the numbers up or down.



Tap Cancel to cancel or Write to send the updated value to lantern. The edited parameter is immediately stored in the lantern and the new value flashes briefly after it has verified by the lantern.

If the set value is too high or low, a warning message is shown and the value cannot be stored.



## 4. Pages

On the pages you will find information about the lantern, change settings and send commands. Observe that if your lantern do not have a specific module installed, then there is no information about that module.

### 4.1. DEVICE STATUS

Here you will find information about the Light, Power, Temperature, Position, Counters and Engineering values. You cannot make any changes to the lantern from this page. Observe, that some values/settings may not be available in your lantern.

#### 4.1.1. Light

Light Status:	Shows the current light status, Active/Idle
Lantern Health Status:	Any possible error or warning is shown in the health status
Photocell Value:	Shows the real-time photocell value
Day-to-Night:	Latest transition time from day mode to night mode
Night-to-Day:	Latest transition time from night mode to day mode

#### 4.1.2. Power

Battery Voltage	Real time battery voltage
Battery Voltage Max	Maximum battery voltage during the last 24h
Battery Voltage Min	Minimum battery voltage during the last 24h
Battery Voltage Avg	Average battery voltage during the last 24h
Power Consumption:	Real time power consumption (measured only when light is lit)

#### 4.1.3. Temperature

Temperature	Real time temperature
Max. Temp. 24h	Maximum temperature during the last 24h
Min. Temp. 24h	Minimum temperature during the last 24h
Avg. Temp 24h	Average temperature during the last 24h

#### 4.1.4. Position (If GPS module installed)

GPS Latitude	Latest measured latitude position
GPS Longitude	Latest measured longitude position
GPS Time	Time of last fix
GPS Accuracy	GPS horizontal dilution of precision

#### 4.1.5. Counters

Operating Hours	Total illumination time
Power Cycle Counter:	Indicates the number of times power has been removed from lantern
System Reset Counter:	Number of reboots



## 4.1.6. Engineering

Measured LED Current  
 Measured LED Voltage  
 Lantern Tilt Angle  
 LED Max Intensity

## 4.2. CONFIGURATION

On this page you can review and change the values of the Flasher, Charger, GPS & Sync, Tilt and Impact, Dated Shutdown and Bluetooth® Settings. Tap Write button to send new values to the lantern. The advanced settings are shown in *italics*

### 4.2.1. Flasher

Flash Character: Select a standard flash character or create a custom flash character.  
 LED Intensity: Change LED Intensity based on intensity percent value or distance (NM)  
 Photocell Threshold: Lantern operating ambient light threshold in lux  
 Light Mode: Lantern operating mode (Photocell, Forced Idle, Forced Active or Day Lantern)

#### *Advanced Settings*

*LED Current: **Product specific setting that must not be changed!***  
*Photocell Hysteresis: Hysteresis setting for turning off the lantern (lux)*  
*Astro Offset Sunrise: Offset for turning lantern off when in Astro mode (min)*  
*Astro Offset Sunset: Offset for turning lantern on when in Astro mode (min)*  
*Lantern Type: Lantern Installation Type (Stand alone, Primary or Standby)*  
*Event log: Enable (Yes) or disable (No) the Event log*

### 4.2.2. Charger Settings

Minimum Battery Voltage: Minimum Voltage level for light operation.

#### *Advanced Settings*

*Cut In Voltage: Set minimum voltage for start charging.*  
*Cut Out Voltage: Set voltage for charger to stop charging.*  
*Charging Mode: Set charging mode (On/Off or PWM charging)*  
*Battery Hysteresis: Battery reconnecting hysteresis (V)*  
*Battery Temp. Compensation: Charging temperature compensation (-mV/°C)*  
*Boost Charge Hysteresis: Set boost charge compensation (V)*

### 4.2.3. GPS & Sync

Max Distance from fixed: Max drift distance from GPS fix (meters)  
 Fixed Latitude: Set fix Latitude  
 Fixed Longitude: Set fix Longitude  
 GPS Checkup Interval: Set position checkup interval (min).  
 GPS Checkup Duration: Set position checkup duration (min)  
 Sync Setting: Set lantern Sync mode (Off, Cable, GPS or Cable and GPS)

#### *Advanced Setting*

*Sync Delay: Set Sync Delay (sec)*

### 4.2.4. Tilt and Impact

Tilt angle Limit: Set maximum allowed tilt angle (deg) before shutdown occurs.

*Advanced Setting*

*Shutdown if tilted:* Set lantern to shut down if tilted (Yes or No)

## 4.2.5. Dated Shutdown

Dated Shutdown Enabled: Enable or disable dated shut down (Yes or No)

*Advanced Settings*

*Shutdown Date:* Set date to shut down lantern

*Startup Date:* Set date to start up lantern

## 4.2.6. Bluetooth Settings

Bluetooth Device name: Set lantern's Bluetooth name

*Advanced settings*

*PIN Code Enabled:* Enable or disable lantern PIN code (give PIN code to change setting)

*PIN Code:* Set new PIN Code

## 4.3. COMMANDS

On the COMMANDS page you can do a lantern test and download the event log.

**Test Lantern**

The Test command runs the lantern for 3 minutes.

**Download event log**

This command will download the full event log to your phone. You can now save it or share it.

## 4.4. ABOUT

### 4.4.1. Device

Product Code

Serial number

*Advanced settings*

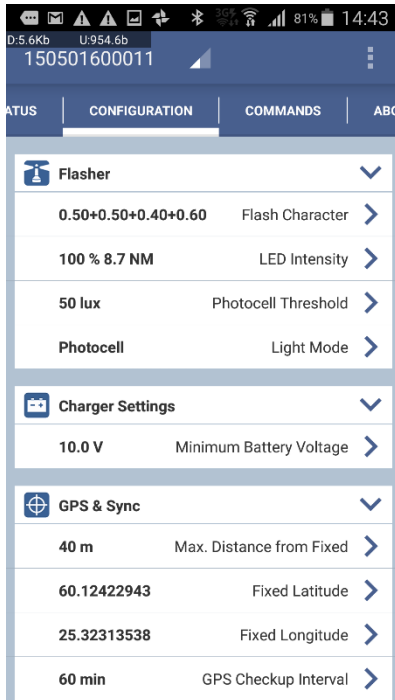
*Bluetooth Firmware*

*Lantern Software Version*

*GPS Software Version*

*GPS Hardware Version*

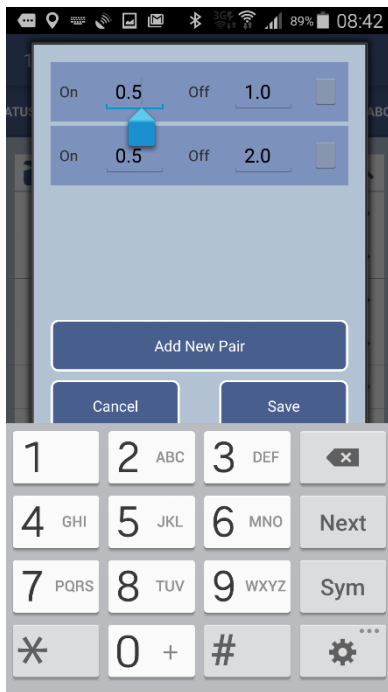
## 5. Create a custom Flash Character; Step by Step Instructions



1. Select CONFIGURATION page
2. Tap on > symbol to the right of Flash Character



3. Select an existing Character from the list as a starting point and
4. tap "Edit Flash Signal" to customize the character.



5. Change the On/Off timing. If needed add a new On/Off Pair or delete an existing pair by tapping the gray X. Tap Save, when done.
6. The new character will be saved as Custom.