



# BlueBeacon Board/B

## User manual

### Introduction

BlueBeacon Board/B, henceforth identified with the terms “product”, “device” or “beacon”, is a Bluetooth Low Energy (BLE) beacon for proximity applications. BlueBeacon Board/B uses iBeacon(TM) technology and/or Eddystone(TM) format specifications (with full-support of Eddystone specifications, including GATT and EID). It also supports Quuppa Intelligent Locating System for accurate RTLS.

BlueBeacon Board/B is supplied in a stand-alone box configuration housed inside a plastic industrial container with IP65 rating. The typical configuration includes the integrated antenna. Two options are possible, distinct by type of power supply:

1. battery power supply (code **BlueBeacon 06/B/ANT-BAT**). The beacon is powered by a thionyl lithium chloride battery (3.6V nominal voltage)
2. external continuous power supply (code **BlueBeacon 06/B/ANT-VDC**). The beacon is powered by a two-pole connector with screw terminal block, and accepts voltages between 3VDC and 30VDC.

Before you start using a BlueBeacon device, verify that it is undamaged and carefully read the instructions in this user manual, particularly the indications in the "Safety" section.

BlueUp S.r.l. disclaims any and all liability if the devices are used in modes and environments incompatible for keeping the product intact, safe and in operation.

### Procedures

#### Installation and positioning

Install the beacon on wall using the plastic flanges to fix it with screws.

#### Beacon power supply

**BlueBeacon 06/B/ANT-BAT**: insert the thionyl chloride thionyl battery (nominal voltage  $V_{BAT} = 3.6V$ ) into the battery holder, paying attention to the polarity shown on the board. See Safety section for battery use.

**BlueBeacon 06/B/ANT-VDC**: supply the device via the terminal connector. The supply voltage VDC must be continuous, with a value between 3VDC and 30VDC. Pass the power cable through the special cable gland on the lower wall of the container. Do not reverse the polarity of the power supply. Reversal of the polarity can irreversibly damage the device. Use PS1 category power supply.

In any case, never power the device with modes and power sources other than those indicated.

#### Beacon use

Once powered, the beacon is immediately active and transmits the advertising frames according to the default settings. To modify beacon configurations, you can use the free app provided by BlueUp and available for iPhone / iPad (Apple Store) and Android (Google Play):

- Configuration app: **BlueBeacon Manager**
- Beacons password: **blueup**

For information on configuration, on services and characteristics, and on all use aspects, please refer to the technical information in the *Products* and *Support* page of the website [www.blueupbeacons.com](http://www.blueupbeacons.com) or contact technical assistance at [support@blueupbeacons.com](mailto:support@blueupbeacons.com).

Credentials to login to BlueBeacon Cloud (cloud back-end for management, synchronization, monitoring and configuration of BlueUp beacons) may be requested at [info@blueupbeacons.com](mailto:info@blueupbeacons.com).

## Safety

These information are an integral and essential part of the product and must be delivered to the user. Read them carefully as they contain important information regarding the installation, use and maintenance.

### Warnings

The device is a professional device whose intended use is aimed at professions or industries and which is not intended for sale to the general public.

The product is a wireless device.

The product must be intended for use for which it was designed. Any other use is considered improper and therefore dangerous.

Operating conditions: temperature -30/+75°C; humidity 10-90%; altitude below 2000 m s.l.m.; degree of pollution 2.

Before you start using the beacon, verify that it is undamaged.



**DO NOT use the beacon in potentially explosive atmospheres. The presence of flammable gas or fumes is a serious safety hazard.**

The company BlueUp S.r.l. disclaims any liability for damages caused by an inadequate use of the device and the failure to observe the information provided herein.

### Batteries

**BlueBeacon 06/B/ANT-BAT** is powered by Lithium thionyl chloride batteries. The standard size of the battery is size A. However, the support board is designed to accommodate, alternatively, a battery holder for size C, as shown in the table below. according to the following table.

Battery – Lithium thionyl chloride (Li-SOCl <sub>2</sub> , nominal voltage 3.6V)						
Configuration	Size	Model	Typ. capacity	Diameter	Height	Weight
Standard	A	SAFT LS17500 (or equiv.)	3.6Ah	17.1 mm	50.9 mm	22 gr
Optional	C	SAFT LS26500 (or equiv.)	7.7Ah	26.0 mm	50.4 mm	48 gr

### Battery replacement

Battery replacement must be performed by an adult. To replace the battery, follow the instructions below:

1. unscrew the screws on the front cover;
2. remove the battery from the battery holder;
3. insert the new battery in the battery holder, paying attention to the polarity indicated on the battery holder;
4. screw the screws on the front cover

### CAUTION



**DO NOT power the device with other batteries.**  
**Explosion hazard if battery is replaced with the wrong type.**



**DO NOT insert the batteries into the battery holder with the positive and negative contacts reversed.**



**DO NOT disassemble, puncture or damage the batteries.**



**DO NOT** recharge the batteries.



**DO NOT** short the positive and negative contacts of the batteries.  
**DO NOT** cause a forced depletion of the batteries.



**DO NOT** throw the batteries in fire.



**DO NOT** place the batteries in the following environmental conditions: in the vicinity of heat sources, exposed to direct sunlight, high temperatures, high humidity, extremely-low pressure, in contact with water.



**DO NOT** handle the battery with metal objects (such as forceps, scissors,...). In general, avoid the metal contacts on the battery from coming into contact with other metal objects, including other batteries. This could cause a short circuit, damage the battery and cause overheating or explosion. If the battery is stored or thrown away, make sure it is covered individually with insulating tape.



**DO NOT** swallow the battery.  
Chemical burn hazard.



This product contains a coin cell battery. If the coin cell battery is swallowed, it can cause severe internal burns in just 2 hours and result in death.



**Keep new and used batteries out of the reach of children.**

If the battery compartment does not close tightly, stop using the product and keep it out of the reach of children.

In the event of suspected ingestion of the batteries or their insertion into other body orifices, seek medical advice immediately.

## **Waste disposal**



### ***In implementing the Directives 2011/65/EU and 2012/19/EC on the restriction of the use of hazardous substances in electrical and electronic equipment and the disposal of waste.***

The crossed bin symbol on the product, on the attached manual or on its packaging indicates that at the end of the product life, it must be collected separately from other waste. The user must, therefore, take the remote control to an authorized disposal center for collection of electronic and electrical waste, or return it to the dealer when purchasing a new similar appliance, on a one to one basis. Appropriate separate collection for the subsequent forwarding of the product sent for recycling, treatment and environmentally compatible disposal helps to prevent negative environmental and health effects and promotes the reuse and/or recycling of materials making up the equipment. Illegal dumping of the product by the user entails the application of administrative sanctions in the current provisions of law.

For more information about the collection systems, contact your local authorities.

### ***In implementing Directive 2006/66/EC on the reduced use of hazardous substances in batteries and the disposal of the same.***

The crossed bin symbol on the appliance or its packaging indicates that the batteries must not be disposed of with the rest of the household waste, as they may contain substances that are potentially harmful to the environment and health. Remove the old battery from the device and turn it in at the appropriate collection points.

## **Disclaimer**

This manual is intended to provide a brief summary of our knowledge and some guidance regarding the use of the beacon and its parts, including the battery. The information contained herein has been provided by sources that BlueUp S.r.l. considers to be dependable and is accurate to the best knowledge of the company. This sheet is not intended to be an inclusive document on worldwide hazard communication regulations. The information is provided in good faith. Each user of this material needs to evaluate the conditions of use and define the appropriate protective mechanisms to prevent the exposure of persons, property damage or release to the environment.

BlueUp S.r.l. assumes no responsibility for injury to the recipient or third persons, or for any damages resulting from misuse of the device and its parts.

## **Warranty**

Refer to BlueUp General Terms and Conditions of Sale available at [www.blueupbeacons.com](http://www.blueupbeacons.com)

## **Conformity**

Hereby, BlueUp Srl declares that BlueBeacon Board B is in compliance with Directives 2014/53/UE (RED) and 2011/65/UE (RoHS 2) and 2015/863/UE (RoHS 3).



The full text of the EU declarations of conformity is available at the following internet address:  
[www.blueupbeacons.com](http://www.blueupbeacons.com)

Frequency band: 2400 – 2482 MHz  
Maximum radiated power: 2.5mW (+4dBm)

## **Contacts**

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