



BlueBeacon devices - BLE beacons

User manual

Introduction

BlueBeacon devices (henceforth identified with the terms “products”, “devices” or “beacons”) are Bluetooth Low Energy (BLE) beacons for proximity applications. Beacons use iBeacon^(TM) technology or Eddystone^(TM) format specifications. BlueBeacon series includes the following devices:

- BlueBeacon Mini (cod. BlueBeacon 01): with one lithium coin battery 3V mod. CR2477
- BlueBeacon Maxi (cod. BlueBeacon 02): with two alkaline battery 1.5V mod. AA (LR6)
- BlueBeacon Forte (cod. BlueBeacon 04): with one lithium battery 3V mod. CR123A (CR17345)
- BlueBeacon Tag (cod. BlueBeacon 05): with two lithium coin battery 3V mod. CR2032
- BlueBeacon Sensor (cod. BlueBeacon 07): with two alkaline battery 1.5V mod. AA (LR6)
- BlueBeacon USB (cod. BlueBeacon 12): USB-powered dongle with nominal voltage 5V

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.s. disclaims any and all liability if the devices are used in modes and environments incompatible for keeping the product's intact, safe and in operation.

Procedures

Beacon activation

- Battery-powered beacons (mod. Mini, Maxi, Forte, Tag, Sensor): pull the tab out of the device (if present) or insert the battery/batteries in the battery holder, taking care of the battery polarity according to the indications on the battery holder. For inserting or replacing the battery in some models (Mini, Forte, Maxi with screws) it is required a Phillips screwdriver.

- USB-powered beacons (mod. USB): insert the beacon into an USB port of an electronic device (PC, battery charger, ...)

Beacon use

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

BlueBeacon Mini, Maxi, Forte, Tag, Sensor (second-generation firmware):

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

BlueBeacon USB (first-generation firmware):

- Configuration app: **BlueBeacon Tool**
- Beacons password: **00000000**

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 or contact technical assistance at support@blueupbeacons.com.

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

Safety

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

Warnings

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

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.

Make sure the beacon is always kept in a dry environment.

The beacon is a wireless device. Please be attentive in its use, in the case of use near (less than 5 cm) a pacemaker or other electronic medical life-saving devices as it transmits radio waves that can interfere with the proper functioning of these devices. Contact medical device manufacturer for more information.

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

Batteries

BlueBeacon Mini, Maxi, Forte, Tag and Sensor beacons are powered by batteries, according to the following table:

Beacon model	Batteries				
	Q.ty	Common name	IEC60086 name	Type	Nominal voltage
Mini	1	CR2477	CR2477	Lithium (LiMnO ₂)	3V
Maxi	2	AA	LR6 FR6	Alcalyne Lithium (LiFeS)	1.5V 1.5V
Forte	1	CR123A	CR17345	Lithium (LiMnO ₂)	3V
Tag	2	CR2032	CR2032	Lithium (LiMnO ₂)	3V
Sensor	2	AA	LR6 FR6	Alcalyne Lithium (LiFeS)	1.5V 1.5V

DO NOT power the device with other batteries. The use of other batteries is potentially dangerous.

Battery replacement must be performed by an adult.

It is recommended to observe the following precautions:

- 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, 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 put the battery in your mouth. If the battery (or the liquid contained in it) is ingested, immediately contact a doctor. The ingested battery must be immediately removed. Swallowing the battery or the liquid contained in it cause irreversible damage to the digestive system, within two hours, including possible death.
- The disassembled, perforated or damaged battery can lose its contents:
 - If battery contents come into contact with eyes, rinse immediately with plenty of water for at least 30 minutes. Contact a physician immediately.

- If battery contents come into contact with skin, rinse immediately with plenty of water for at least 15 minutes. If irritation or pain persists, contact a physician.
- The content of the battery can cause respiratory irritation. Exit to fresh air immediately. If irritation persists, contact a physician.
- Keep, under any circumstances, the battery away from children.

In the case of beacon mod. Maxi, Tag, Sensor, it is recommended to observe the following additional precautions:

- DO remove both used batteries from the device at the same time, then replace them with two new batteries.
- Exhausted alkaline batteries (only for Maxi and Sensor) should be immediately removed from the equipment and disposed of. When discharged batteries are kept in the equipment for a long time, electrolyte leakage may occur causing damage to the device.

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 appliance or its packaging indicates that at the end of the product's 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.s. 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.s. 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

The company BlueUp S.r.l.s. guarantees its products for a period of 12 months from date of purchase. The purchase must be verified with a valid receipt issued by the dealer (ie. sales receipt, invoice). In addition, the defective product must be accompanied by a description of the type of malfunction. The warranty covers defects of conformity and/or manufacturing defects.

BlueUp S.r.l.s. may, at its sole discretion, replace the defective product or have it repaired. The costs for shipping the product to BlueUp S.r.l.s. shall be borne by the buyer. In case of an effective detection of defects of conformity and / or manufacturing defects the cost of shipping the product are borne by BlueUp S.r.l.s.. In case of non-detection of defects of conformity and / or manufacturing defects or if the functional defects complained of by the user are not detected as such under verification by BlueUp S.r.l.s., all costs, including the repair or replacement of the product and its subsequent delivery, will be borne by the buyer.

This warranty does not cover the following cases:

1. product used or stored improperly;
2. damage caused by water or moisture;
3. physical and / or electrical related to intentional, negligent or accidental acts;
4. damage caused by force majeure (eg. weather, electrical noise, ...);
5. a state of neglect of the product;
6. damage caused by mechanical, electrical, electronic or software changes made to the product.

Moreover, the warranty does not cover accessories, such as batteries.

Battery replacement can be done by following the instructions in the user manual. Although the replacement is a relatively simple operation, there must be paid particular attention to the following aspects:

- polarity of the battery: the battery must be inserted with the correct polarity;
- manipulation of the circuits: it is preferable not touch the circuits or touch them along the edges to prevent damages due to mechanical friction or static discharge.

If the product is not handled properly or is damaged during battery replacement, BlueUp S.r.l.s. is not able to ensure its correct functionality.

In no event BlueUp S.r.l.s. be liable for incidental or consequential damages, including any lost profits or other economic damages resulting from the use of its products.

BlueUp S.r.l.s.

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Hereby, BlueUp Srls declares that the following devices:

BlueBeacon Mini (cod.: BlueBeacon 01), Maxi (BlueBeacon 02), Forte (BlueBeacon 04), Tag (BlueBeacon 05), Sensor (BlueBeacon 07), BlueBeacon USB (BlueBeacon 12), are in compliance with Directives 1999/5/CE (R&TTE) and 2011/65/UE (RoHS 2).



The full text of the EU declarations of conformity is available at the following internet address:
www.blueupbeacons.com

Frequency band: 2400 – 2483.5 MHz

Maximum radiated power: 2.5mW (BlueBeacon USB, 1mW)

BlueBeacon-series beacons are certified for iBeacon^(TM) technology and full support for Eddystone^(TM) specifications.



Eddystone