



# Ultra

## User manual

### Introduction

BlueUp Ultra, in all its variants), henceforth identified with the terms “product”, “device” or “beacon”, is a Bluetooth Low Energy (BLE) beacon for proximity applications. BlueUp Ultra uses iBeacon<sup>(TM)</sup> technology and/or Eddystone<sup>(TM)</sup> format specifications. It also supports Wirepas mesh technology (anchor node).

BlueUp Ultra is suitable for indoor installations.

BlueUp Ultra is available in the following variants:

**ZERO:** battery powered;

**BASE:** ZERO + micro-USB port for USB power supply, button, LED;

**PLUS:** BASE + temperature and humidity sensor;

**DELUXE:** PLUS + pressure sensor and CO2 sensor.

BlueUp Ultra is powered by 4x 1.5V AA alkaline batteries (Ver. ZERO) or by 4x 1.5V AA alkaline batteries and external USB 5V power (Ver. BASE, PLUS, DELUXE)

Before you start using a BlueUp 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's intact, safe and in operation.

### Device installation

BlueUp Ultra can be installed indoor, on ceiling or on lateral walls. Thanks to its directivity and front-to-back ratio, it improves communication range and accuracy.

Ceiling installation is suggested to improve floor detection. Wall installation is suggested to improve room detection. Mixed installation (ceiling, lateral walls) is possible.

Installation MUST be performed using screws through the two holes in the lateral flanges. Screws must have a maximum diameter of 2.5mm, a diameter of the head above 4mm and must be suitable for the type of wall on which the device is installed (plasterboard, hollow bricks, solid bricks). The total weight of the device with batteries is 200gr.

### Device power supply

**ZERO:** device is powered by 4 AA alkaline batteries. Insert the 4 batteries in the 2 battery-holders and close the back panel, by screwing the 4 screws provided with the device. (see “Safety” section at pag. 2 for details.)

**BASE / PLUS / DELUXE:** device is powered by micro-USB port or by 4 AA alkaline batteries. In case of power from external USB power supply unit, batteries can be inserted or not. If present, batteries are used as backup power supply in case of momentary lack of power supply from USB. (see “Safety” section at pag. 2 for details.)

### Device use

Once powered, the beacon is immediately active and works according to loaded firmware.

#### BLE beacon firmware

To modify beacon configurations, you can use free configuration app provided by BlueUp and available for iPhone / iPad (Apple Store) and Android (Google Play):

- Configuration app: **BlueBeacon Manager**
- Beacons default 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).

### Wirepas firmware

Beacon can operate as an anchor tag. Settings can be updated using Wirepas Network Tool or MeshCube interface. For technical details, please refer to the technical information in the Support Center of the website [www.blueupbeacons.com](http://www.blueupbeacons.com) or contact technical assistance at [support@blueupbeacons.com](mailto:support@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.

The device can be used in professional healthcare environments (please refer to Annex A for more information).

Operating conditions: temperature -20/+60°C; humidity 20-80%.

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.**

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.

### USB power supply

BlueUp Ultra Base, Plus and Deluxe can be powered with external USB power supply using a standard USB-type A to microUSB type B cable (not provided).

BlueUp Ultra Base, Plus and Deluxe, when powered from microUSB port, requires an external 5V, min. 500mA USB adapter (not provided).

### Batteries replacement

BlueUp Ultra uses batteries, according to the following table:

Batteries				
Q.ty	Common name	IEC60086 name	Type	Nominal voltage
4 (2 + 2)	AA	LR6	Alkaline	1.5V



**Battery replacement must be performed by an adult.**

To replace the battery, follow the instructions below:

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



Exhausted alkaline batteries 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.



The disassembled, perforated or damaged battery can lose its contents:  
If battery contents come into contact with eyes or skin, rinse immediately with plenty of water for at least 30 minutes. Contact a physician immediately.  
The content of the battery can cause respiratory irritation. Exit to fresh air immediately. If irritation persists, contact a physician.



**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 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. 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**

### **EU (ETSI) / UK (UKCA)**

Hereby, BlueUp Srl declares that BlueUp Ultra (in all its variants: Zero, Base, Plus, Deluxe) is in compliance with Directives 2014/53/UE (RED), and 2011/65/UE (RoHS2) and 2015/863/UE (RoHS3).



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)

## **Annexes**

*Annex A:* Technical information for use of BlueUp Ultra in professional healthcare environments

## **Contacts**

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