

Document Number : **14-D-0001**

Beacon LB2010

(Type marBLE)

Product Document

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Document Purpose

This document was produced for Users' understanding and guide

Contact

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Document version and History

No	Version	Release Date	History	Etc
1	v1.0	2014.09.20	First Release	
2	v1.1	2014.11.26	Revised	
3	v1.2	2015.09.09	Revised	

Beacon Resale Site

<http://beacon.diointeractive.com/>

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1. PRODUCT SPECIFICATION

A. Product Overview

- Compatible with Bluetooth Low Energy®, Android 4.3.
- Battery lasts over 1 year
- Android Mobile SDK
- Bluetooth API available: Battery, Device Information, Proximity

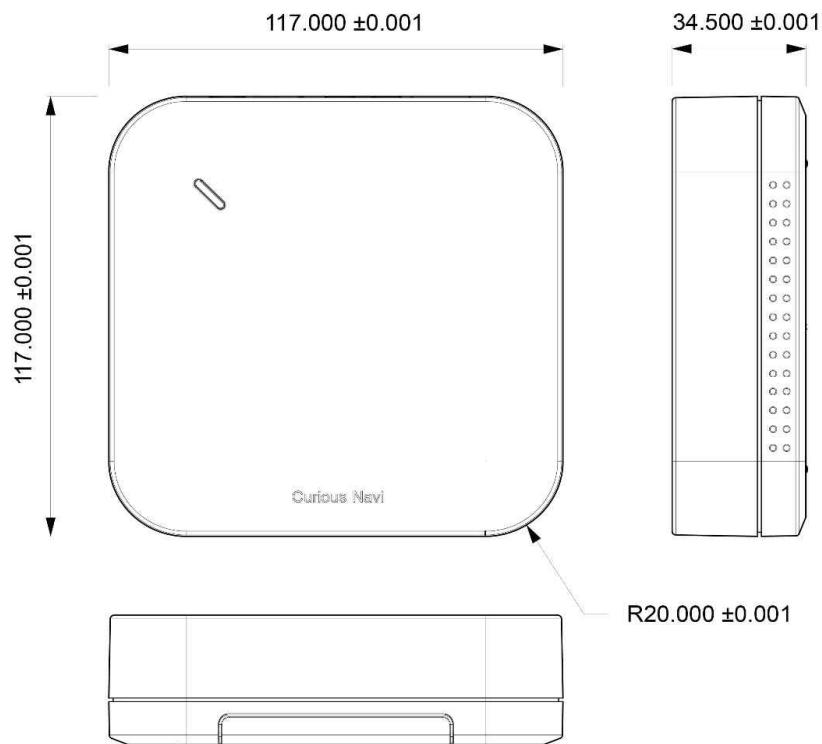
B. Product Specification

- Frequency operating range : 2.402GHz to 2480GHz
- Version : BT4.0 (Bluetooth Low Energy)
- Operating Voltage : 3.6V
- Modulation Techniques : GFSK
- Programmable Output Power Ranging From (dBm) : -23 to 4dBm
- Receiver sensitivity : -93 dBm
- Weight : Main Body 133g, Battery 99g
- Dimension : 117 X 117 X 34.5mm
- Supported O/S : Android 4.3+, iOS 7+
- Read Range : 5~20m (Distance Controllable/LOS)
- Temperature Range : -10 ~ 60 °C

C. Product components

- Main Product
- Battery: 2ea (SB-C02)





Power Supply

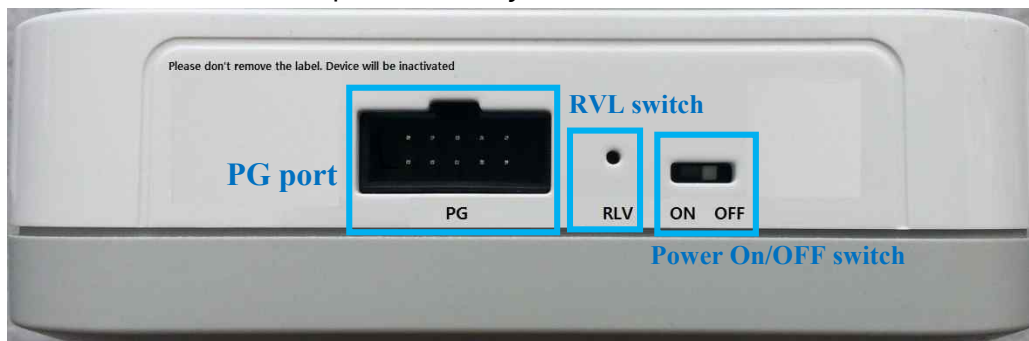
- Use two batteries.

Caution: Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions.



- Use switch to turn on/off the power

- PG port is for Download purposes only and used by manufacturer
- RLV switch is for operators only.



Notice: Please don't remove the label. Device will be inactivated

Operational Description

To operate LB2010, minimum voltage of 2.1V is required.

Included battery (SBC02) has 3.6V and current of 8.5Ah.

LB2010 has LDO and Step-down converter.

With input of 3.6V, LDO outputs 3.3V.

Output voltage from the LDO will be inserted to Step-down converter, which will output 2.1V to BLE(Bluetooth low energy) IC(CC2540F256).

When the voltage is supplied to BLE IC, LED will blink for two seconds.

Status check

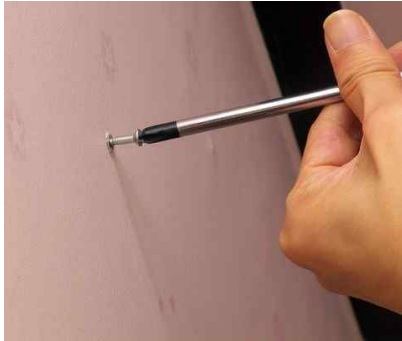
- In normal state, LED lamp will blink in green
- When the battery is low, LED lamp will blink in red and they need to be replaced



※ Download port and Function Key are not for general users

Mount

- Tighten the screws on the wall.
- Mounting the LB2010(marBLE) to the screw.

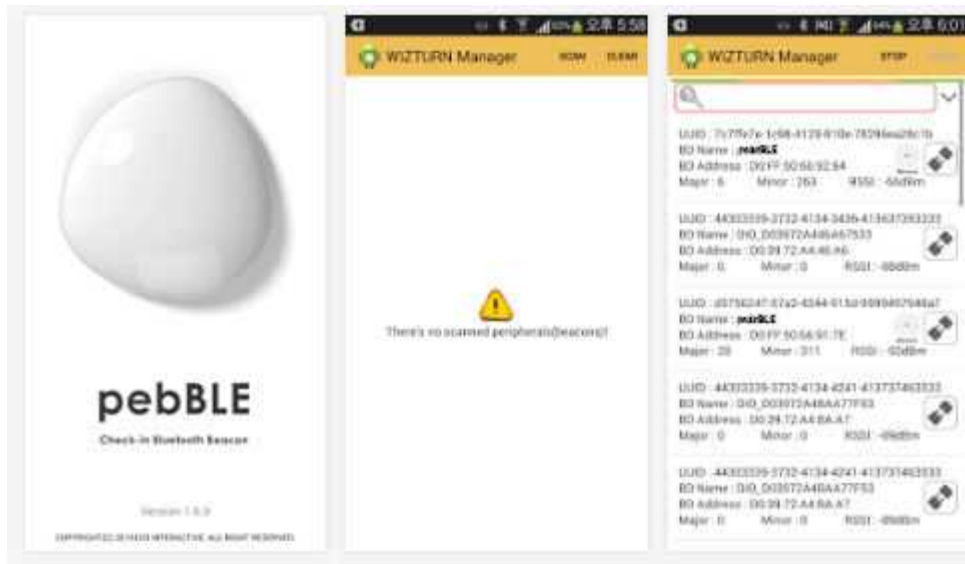


Cautions

- This is a wireless-installation device and may cause interference between radio waves. This device cannot be used for safety-related services.

D. Product Support Application

- Sample App: <https://play.google.com/store/apps/details?id=com.wizturn.manager>



Bluetooth 4.0 Low Energy(BLE) app for Wizturn Beacon-Type pebble.

Try to test Wizturn Beacon with this app and learn more about beacon based service.

- Scan marBLE (device discovery)

E. Safety Precautions

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacture could void the user's authority to operate such equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE WARNING

- Changes and modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- It is desirable that it be installed and operated with at least 20 cm or more between the radiator and person's body(excluding extremities: hand, wrists, feet, and ankles)

CE2200

FCC ID : 2ADMB-LB2010

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- End of document -