WiBeat BLE Quick Start Guide

General Information

WiBeat BLE (part number - BB050) is low-power Bluetooth device used as beacon device supporting both iBeacon and Eddystone BLE technologies, as well as Leantegra proprietate Location Tag mode (using Bluetooth Low Energy technology). Device can be used as stationary beacon (wall/columns/furniture) as well as wearable tag (on-body placing, indoor transport etc.).

Powering / Battery Installation

The WiBeat BLE is delivered with the battery installed by default, device is turning OFF. Battery type - CR2450, output voltage - 3V, typical capacity - 620mAh (may vary depending on manufacturer and brand).

In case of discharging battery (see Device Operation section how to check battery charging level) next steps should be performed for it replacing:

1) remove the two screws from the enclosure and pull it apart
2) remove discharged battery by pushing it using finger or another not-metalized tool (using metal tools may cause circuit board damage); discharged battery should be properly utilized according to it type
3) place new CR2450 battery negative side down to circuit board; incorrect battery placing may cause WiBeat BLE damage and breakdown
4) the device will automatically power-on when the battery is inserted
5) place the PCB back in between the two parts of the enclosure and insert the screws
6) battery relative capacity may be checked by short single pressing for control button (see Device Operation section)

Device Operation

Normally WiBeat BLE doesn't need any control action. After turning ON device periodically sends BLE frames to ether, working as beacon device. However button and LED can be used for turning ON/OFF, changing working mode, and indicating current mode and battery status.

Turning ON/OFF

1. **Long press** for button (more than 3 sec) will turns ON device (if it was turned OFF previously)
2. Successful turning ON will be confirmed by **blinking of the LED** several times:

Blinking	Working mode
3 short green blinks	Hybrid mode
4 short green blinks	iBeacon mode

5 short green blinks	Eddystone mode
6 short green blinks	Location Tag mode
1 short red blink and 7 short green blinks	Testing mode (is used only for manufacturing needs)

3. **Long press for button** (more than 3 sec) will turns device OFF, if it was turning ON previously. Before turning OFF, LED will shortly blink 1 time with red color.

Check battery charging status

1. **Single short pressing** for button will cause indicating battery charging status:

Blinking	Charging level
4 short red blinks	> 75%
3 short red blinks	> 50%
2 short red blinks	> 10%
1 short red blinks	< 10%

Check/Change working mode

1. **Double short pressing** for button will cause indicating current work mode:

Blinking	Working mode
3 short green blinks	Hybrid mode
4 short green blinks	iBeacon mode
5 short green blinks	Eddystone mode
6 short green blinks	Location Tag mode
1 short red blink and 7 short green blinks	Testing mode (is used only for manufacturing needs)

2. To change working mode, button should be **shortly pressed corresponding times**:

Short pressing	Switch to working mode	Indication
3 short pressing	Hybrid mode	3 short green blinks
4 short pressing	iBeacon mode	4 short green blinks
5 short pressing	Eddystone mode	5 short green blinks
6 short pressing	Location Tag mode	6 short green blinks

7 short pressing	Testing mode (is used only for manufacturing needs)	7 short green blinks

This device complies with part 15 of the FCC Rules. Operation is subject to the
condition that this device does not cause harmful interference (1) this device
may not cause harmful interference, and (2) this device must accept any interference
received, including interference that may cause undesired operation.
Changes or modifications not expressly approved by the party responsible for
compliance could void the user's authority to operate the equipment.
NOTE: 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 into 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.
The device has been evaluated to meet general RF exposure requirement. The device can be
used in portable exposure condition without restriction.
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