

# **Beacon / iBeacon / MiniBeacon**

## **Instructions V2.06**

## IMPORTANT TIPS

- ⦿ When the MiniBeacon connected with App over 5 minutes, it will be disconnected with App automatically. This smart feature extends the battery lifetime and secures the device;
- ⦿ The new value will be taken effect only by REBOOT IBEACON, otherwise MiniBeacon will broadcast the previous data all the time.

### 1. Start the configuration APP (Name: BeaconSET)

- 1.1 Download the APP: BeaconSET from App store or Google play, see image 1;
- 1.2 Turn on the Mobile Device's Bluetooth, see image 2;
- 1.3 Click the icon "BeaconSET" to open the configuration APP, see image 3;
- 1.4 Start the BeaconSET, it detected and listed many different iBeacons as image 4;



image 1

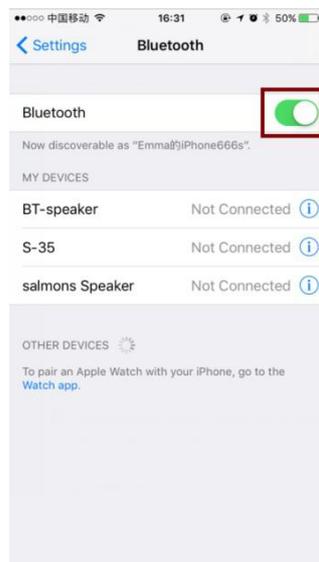


image 2

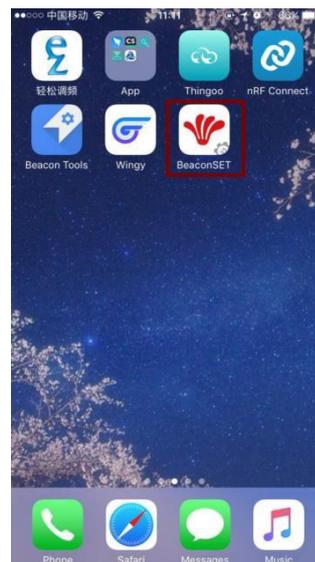


image 3

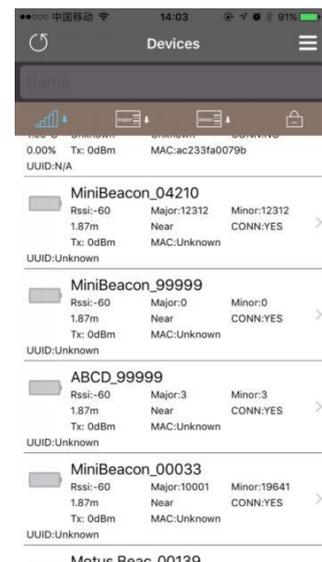


image 4

## 2. How to Change Parameters

2.1 For example, let's change the MiniBeacon\_99999's Major value from 0 to 66, see image 5;

2.2 Click Major to change the value from 0 to **66** and click **save**, see image 6 and image 7;

**2.3 Click Reboot iBeacon to take effect the new value immediately, see image 8;**

2.4 Input password **minew123** and click **OK**, see image 9 and image 10;

2.5 Click the icon  to refresh Devices list, the new value Major 66 has been shown, see image11;



image5

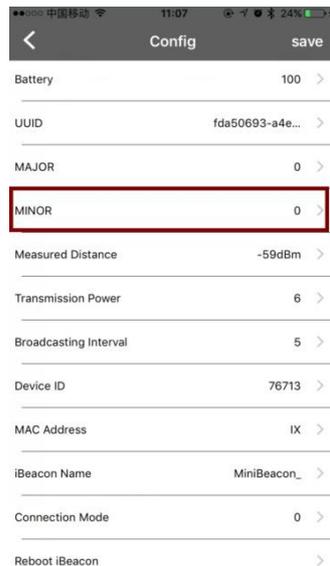


image 6

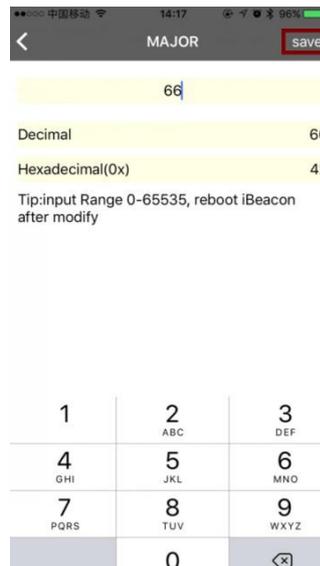


image 7

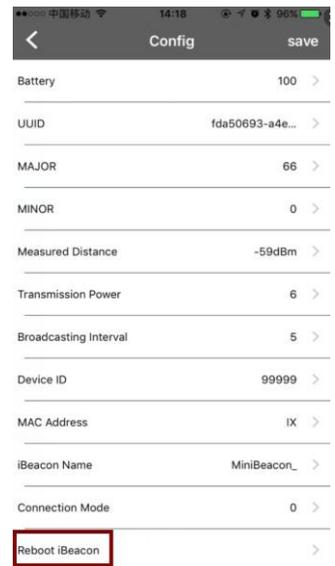


image 8

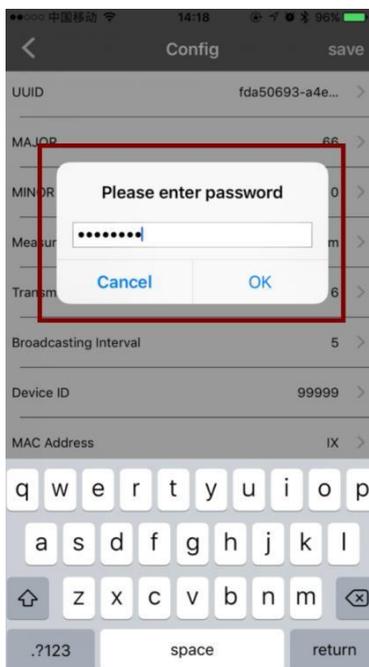


image9

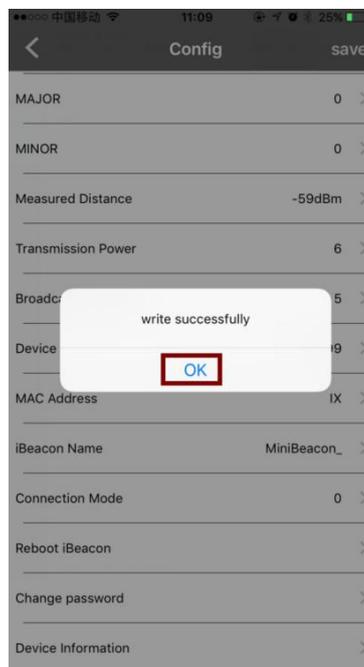


image 10

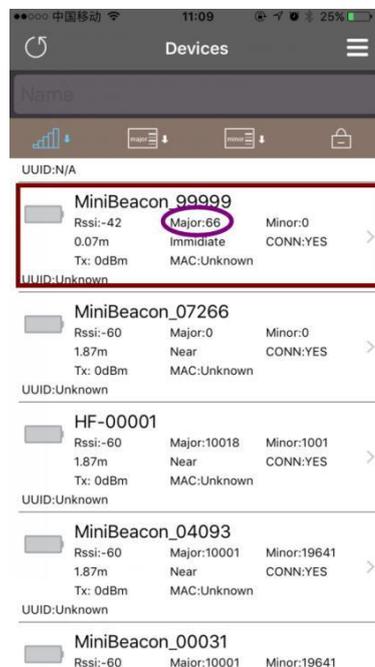


image11

***Tips: Please change other parameters like the steps 2.1 to 2.5.***

### 3. Default Settings

Characteristic	Item	Default Settings	Range
0xFFFF1	UUID	E2C56DB5-DFFB-48D2-B060-D0F5A71096E0 (Proximity UUID)	128 bits
0xFFFF2	Major	0	0-65535
0xFFFF3	Minor	0	0-65535
0xFFFF4	Measured Power	-59 (0xC5)	Tips on BeaconSET
0xFFFF5	Transmission Power	6 (0dBm)	0-7
0xFFFF6	Change Password	minew123	8 characters (Must)
0xFFFF7	Broadcasting Interval	9 (900mS)	1-100 (1-10 Recommended)
0xFFFF8	Device ID	Random (Unique serial ID for	0-99999
0xFFFF9	iBeacon Name	MiniBeacon_	10 characters (Max.)
0xFFFFE	Connection Mode	0: Connectable, configuration mode. 1: Non-connectable, deployment mode.	0,1
0xFFFFF	Reboot iBeacon	minew123 (it is same as the value of Change Password)	---

**Configuration Mode:** It is a factory setting(default); the MiniBeacon can be configured in this mode.

**Deployment Mode:** The MiniBeacon can't be configured in this mode, it is non-connectable.

If configured all attributes of MiniBeacon, please change the Connection Mode to the deployment mode to save battery consumption and enhance the security.

### 4. Example of changing parameter Major

Step 1: Click Major;

Step 2: Input a new value and then Click Save;

Step 3: Click Reboot iBeacon;

Step 4: Input the default password "minew123" (if you don't change it before), then Click OK;

Step 5: Beacon will be disconnected with App, please Click Refresh;

Step 6: Check (the new value of Major has been changed);

**If you want to change other parameters, please note the Step 3, 4, 5 are the necessary procedures.**

### 5. Deployment Notes

5.1 The broadcasting interval and transmission power level can be changed to increase battery life or decrease battery life.

5.2 The reference distance is only a reference; the real distance depends on the physical environment.

## 6. Transmission Power Level

Transmission Power Level	Output Power	Reference Distance (Maximum)
0	-30 dBm	1-2 meters
1	-20 dBm	7 meters
2	-16 dBm	10 meters
3	-12 dBm	12 meters
4	-8 dBm	22 meters
5	-4 dBm	27 meters
6	0 dBm	90 meters
7	+ 4 dBm	>100 meters

## 7. Appendix

7.1 Configuration App in Apple Store: BeaconSET;

<https://itunes.apple.com/app/beaconset/id1052655664?mt=8>

7.2 Configuration App in Google Play: BeaconSET;

<https://play.google.com/store/apps/details?id=com.minnw.beaconset&hl=en>

#### FCC Statement

FCC standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247  
Integral PCB antenna with antenna gain 0.158dBi

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.

Any 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.

If any hardware modify or RF control software modify will be made by host manufacturer, C2PC or new certificate should be apply to get approval, if those change and modification made by host manufacturer not expressly approved by the party responsible for compliance, then it is illegal.

#### FCC Radiation Exposure Statement

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2ABU6-MS88SF3 Or Contains FCC ID: 2ABU6-MS88SF3"

When the module is installed inside another device, the user manual of the host must contain below warning statements;

1. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

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.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.