

Beacon / iBeacon / MiniBeacon

Instructions V2.04

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 SOFT REBOOT, otherwise MiniBeacon will broadcast the previous data all the time.

1. Open the configuration APP (Name: BeaconSET)

- 1.1 Click the icon **BeaconSET** to open the configuration APP, see image 1;
- 1.2 Click the "Settings" to turn on the Bluetooth, see image 2 and image 3;
- 1.3 Turn on Bluetooth, see image 4;
- 1.4 Re-start the **BeaconSET**, it detected and listed many different iBeacons as image 5;

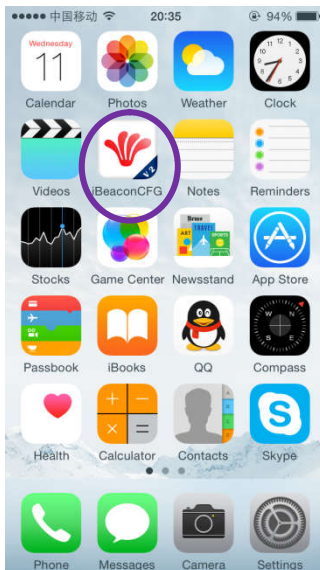


Image 1

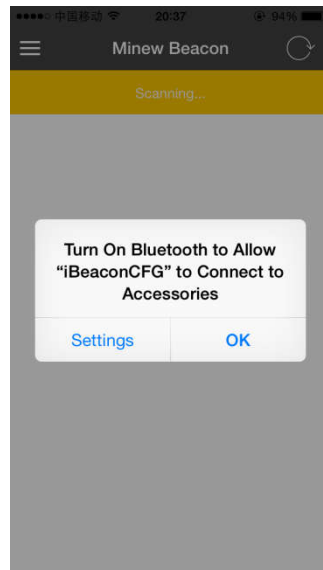


Image 2

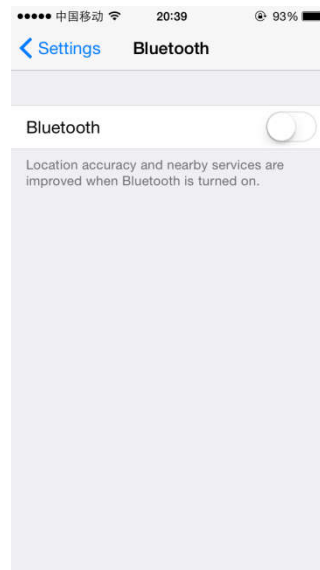


Image 3

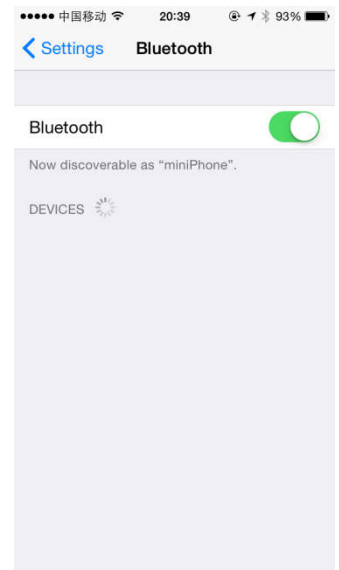


Image 4

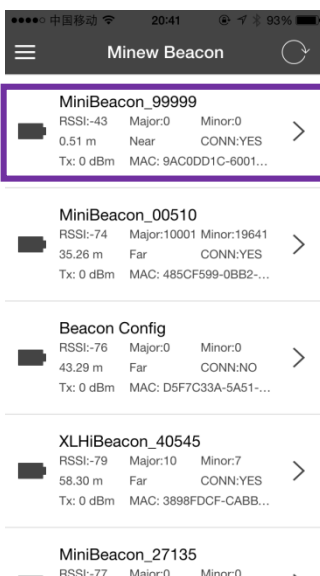



Image 5

2. How to Soft Reboot MiniBeacon

- 2.1 For example, click “Soft Reboot” to reboot the MiniBeacon_99999, see image 5 and image 6;
 2.2 Input the default password “minew123” and save it, see image 7 and image 8;
 2.3 Click the icon  to reboot the MiniBeacon_99999, see image 9 (Click OK, reboot success);

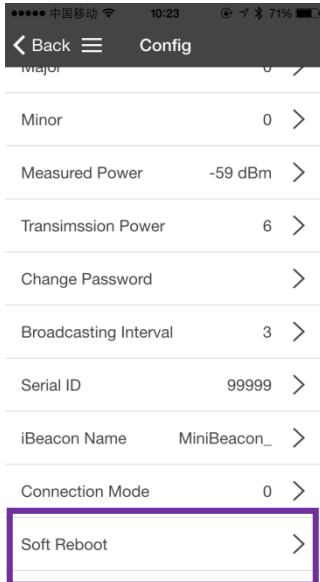


Image 6

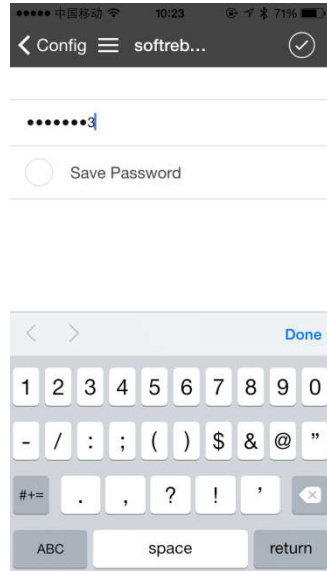


Image 7

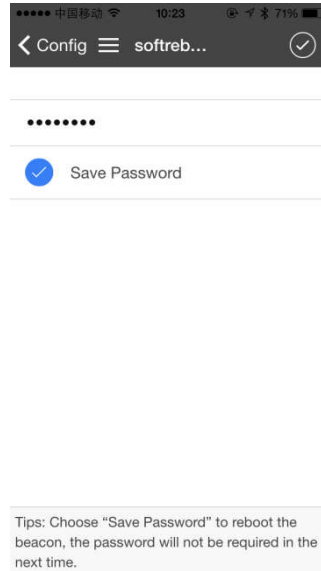


Image 8

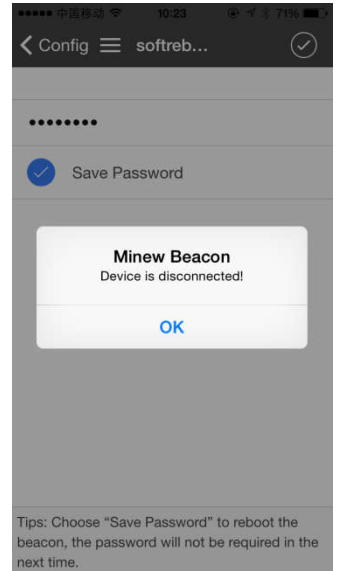



Image 9

3. How to Change Parameters

- 3.1 For example, let's change the MiniBeacon_99999's Major value from 0 to 27, see image 10;
 3.2 Click Major to change the value from 0 to 27, see image 11;
 3.3 Click Soft Reboot to take effect the new value immediately, see image 12;
 3.4 Click the icon  to refresh BeaconSET, the new value Major 27 has been shown, see image 13;

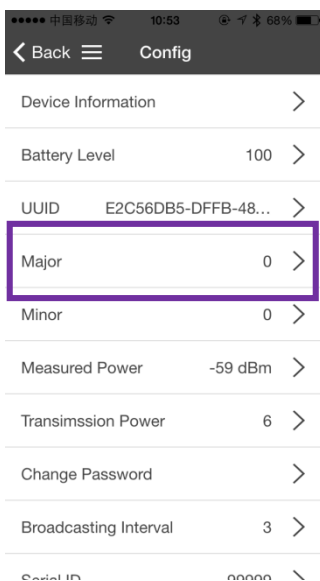


Image 10

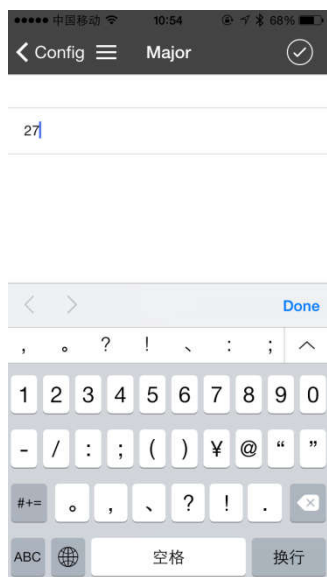


Image 11

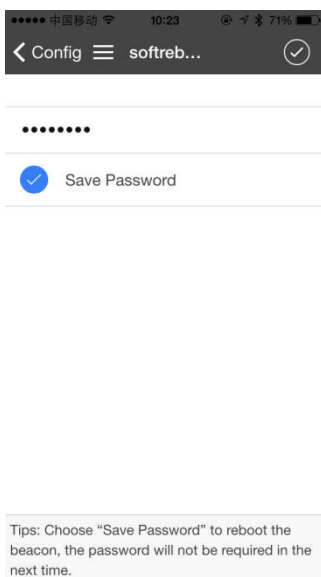


Image 12

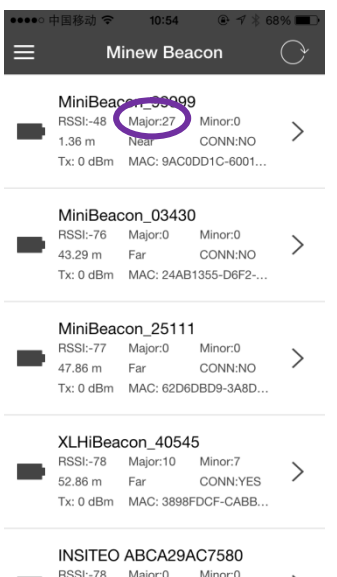


Image 13

Tips: Please change other parameters like the steps 3.1 to 3.4.

4. 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 iBeaconCFG
0xFFFF5	Transmission Power	6 (0dBm)	0-7
0xFFFF6	Change Password	minew123	8 characters (Must)
0xFFFF7	Broadcasting Interval	5(500ms)	1-100 (1-10 Recommended)
0xFFFF8	Serial ID	Random (Unique serial ID for	1-99999
0xFFFF9	iBeacon Name	MiniBeacon_	14 characters (Max.)
0xFFFFE	Connection Mode	0: Connectable, configuration mode. 1: Non-connectable, deployment mode.	0,1
0xFFFFF	Soft Reboot	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.

5. Example of changing parameter Major

Step 1: Click Major;

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

Step 3: Click Reboot/Soft-Reboot;

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

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 Minor or other parameters, the Step 3 to Step 5 is necessary procedure.

6. Deployment Notes

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

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

6.3 Unique ON/OFF capabilities can be used to turn down the broadcasting when not in use and consequently keep the battery fresh many years.

7. 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

8. Appendix

8.1 Configuration App in Apple Store: BeaconSET;

8.2 Configuration App in Google Play: BeaconCFG;

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

8.3 DEMO

iOS: <https://www.dropbox.com/s/0evafwajpdv9z9p/Demo-MiniBeacon%28iOS%29.zip?dl=0>

Android: <https://www.dropbox.com/s/mfqj5bh9cd5sbbm/Demo-MiniBeacon%28Android%29.zip?dl=0>

8.4 SDK

iOS: https://www.dropbox.com/s/84qg3suu0ke43v6/SDK-MiniBeacon%28iOS%29_V2_01052016.7z?dl=0

Android: <https://www.dropbox.com/s/cqmkt8ejt16aswn/SDK-MiniBeacon%28Android%29.zip?dl=0>

8.5 API

iOS: https://www.dropbox.com/s/inymbg3sismxbhw/API-MiniBeacon%28iOS%29_V2_01052016.7z?dl=0

Android: <https://www.dropbox.com/s/mtrrbfj23gozuy9/API-MiniBeacon%28Android%29.zip?dl=0>

8.6 How to configure a MiniBeacon (Reference Video)

<https://www.dropbox.com/sh/peoadkobuohgmn/AAD75mE8aktyJgN7l3FE2LPua?dl=0>