S1501 manual

1.Description

The Beacon module is built-in a battery holder and a coin battery, it can work as alone system. We would like to provide the housing development service at low cost to potential customers.







2.Features

- Built-in Beacon firmware
- Built-in a coin battery
- Bluetooth low energy technology compatible
- Excellent link budget (up to 97dB)
- Enable long range applications
- Accurate digital RSSI
- Compatible with CE and FCC regulation
- High performance and low power 8051 core MCU
- AES security coprocessor

3. Beacon parameter default setting

-UUID: EBEFD08370A247C89837E7B5634DF524

-Major and minor identifier: 0x0001, 0x0001

-Pairing password: 0x666666

-Power Value:0xc5

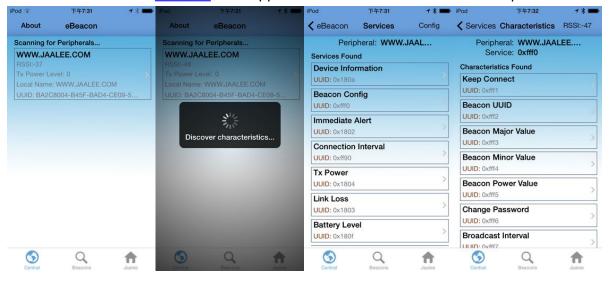
-Broadcast Rate:0x14

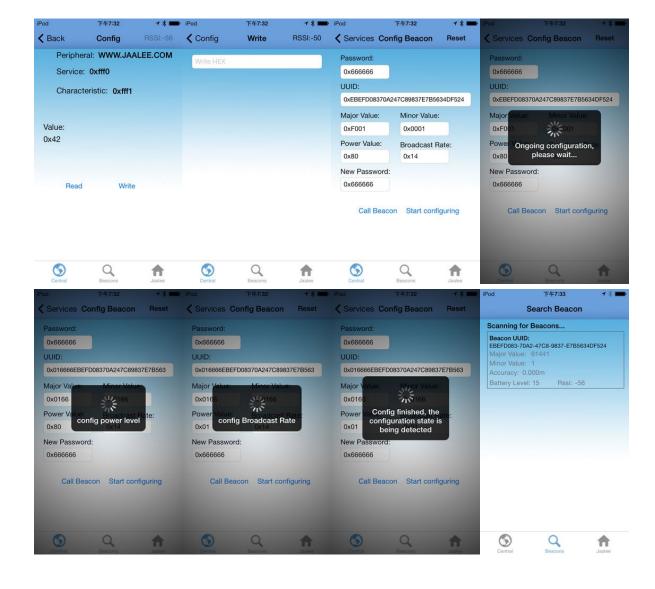
-It can be rang(default)

-It will ring 3 times after reset(default)

4. Modify Beacon parameter

Please download the eBeacon from Apple store and then refer to the below pictures.





5. Electronic Parameters

Item	Test Data	Remarks
Battery model	CR2016(CR2032)	Coin battery, 3.0Vdc, 1pc
Operation Voltage	2.0-3.6V	DC
Operation Frequency	2402-2480MHz	Programmable
Frequency Error	+/- 20KHz	Null
Modulation	QPSK	Null
Standby current	12uA	Null
Output Power	-3 dBm	Programmable
Receiving Sensitivity	-93dBm	High gain mode
Transmission distance	30 meters	BER<0.1%, Open space
Antenna	50ohm	Onboard
Size	23.1 x 23.1 x 4mm (23.1 x	Null
	23.1 x 5.6mm)	

6. Operation state and power consumption

State	Operation Current (mA)
State 1: wake-up	6
State 2: pre-processing	7.4
State 3: pre-receiving	11
State 4: receiving	17.5
State 5: Rx changed to TX	7.4
State 6: transmitting	17.5
State 7: pre-processing	7.4

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interfere nce in a residential installation. This equipment generates and can radiate radio frequency energy and, if no t installed and used in accordance with the instructions, may cause harmful interference to radio communic ations. 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 fol lowing 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.

This device complies with Part 15 of 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, in cluding interference that may cause undesired operation.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modific ations to this equipment. such modifications could void the user's authority to operate this equipment.