

# Bluetooth Smart Switch

Bluetooth Smart Switch is developed and produced including hardware and firmware .It is built-in a CR2450 battery holder. It can work as a standalone system, based on DA14580 BLE 4.0 chip. power saving, wireless antenna and convenient to install.



|                                      |                  |
|--------------------------------------|------------------|
| Mod                                  | Bluetooth        |
| Type of Product                      | Bluetooth        |
| Operating Supply<br>(Vac, Hz or Vdc) | 3V DC            |
| Operating Frequency<br>(RF)          | 2.402GHz-2480GHz |
| Type of Modulation                   | GFSK             |
| Channel Spacing                      | 2                |
| Bandwidth                            | 1                |

### **Antenna Requirement**

|              |                         |
|--------------|-------------------------|
| Antenna Gain | 2.2dBi                  |
| Polarisation | Horizontal polarization |

## **Specifications**

Built - in AltBeacon firmware

Built - in a CR2450 battery holder

Bluetooth Low Energy technology compatible

Suitable for long distance applications

Accurate digital RSSI

High performance and low power ARM CORTEX M0 CPU

AES security coprocessor

## **Default Settings**

Name of Beacon : abeacon\_xxxx

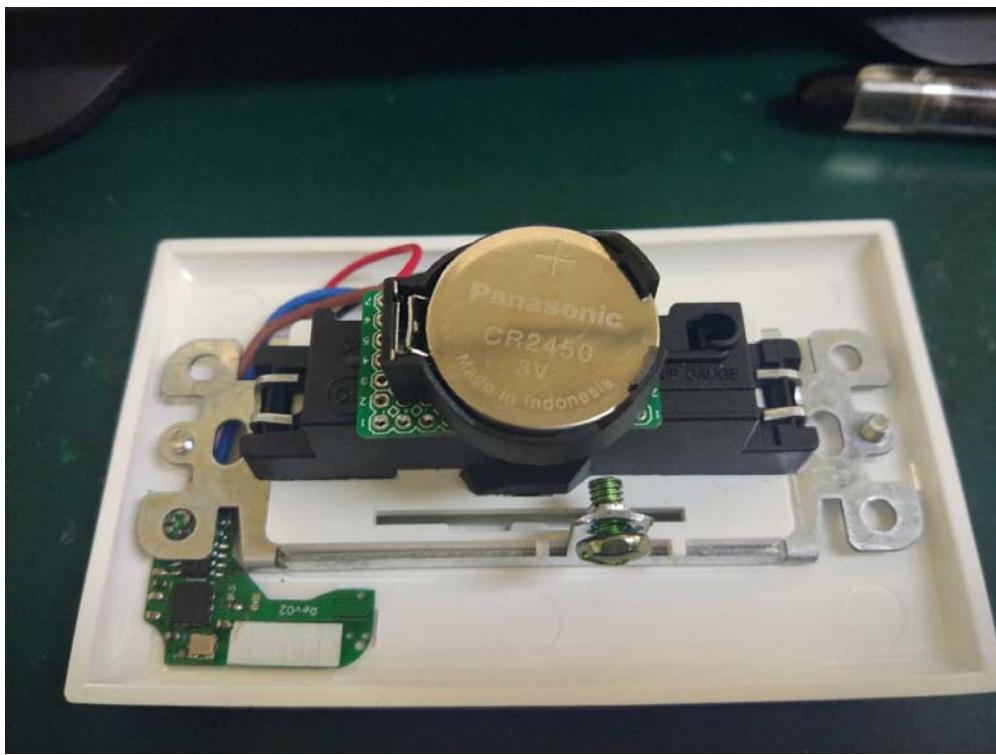
Proximity UUID: B5B182C7-EAB1-4988-AA99-B5C1517008D9

Major and Minor:1,2(Only allowed numeric)

Measured power:-59(Numeric only)

Pairing password:195660(Numeric only)

## **Battery Assembly**



## How to make the equipment start work

After power-up, the Bluetooth smart switch does not broadcast by default. When The Switch changes state from Off State to On State, it should send DIM LIGHT ON event. DIM LIGHT ON event should be sent by the switch every 90 to 120 ms for about 5 to 20 times to avoid the risk of it getting LOST in the air. DIM LIGHT OFF event: when the Switch changes state from On State to Off State, it should send DIM LIGHT OFF event. DIM LIGHT OFF should be sent by the switch every 90 to 120 ms for about 5 to 20 times to avoid the risk of it getting LOST in the air.

This is sent when The device detects LOW battery.

It is sent as soon as low battery is detected. The exit criteria for this alarm should be:

- Low battery condition disappear
- If low battery condition continues to exist, the device should issue low battery alarm every Time it sends any other message such as ON, OFF, OCCUPANCY DETECTED, OCCUPANCY LOST. LOW BATTERY ALARM should be sent by the device every 90 to 120 ms for about 5 to 20 times To avoid the risk of it getting LOST in the air.

(1) search abeacon through shake assistant software; (2) in the search list, select you to configure the Beacon, below we abeacon\_38DF, for example; (3) as shown in figure 2, click "abeacon\_38DF", enter the connection as shown in figure 3.

## **Here is how to through the shake assistant software to configure and modify parameters**

Note: shake assistant before use, please open the mobile phone bluetooth, mobile phone android 4.3 system requirements, iOS 7.0, bluetooth 4.0;

- 1、 Open the bluetooth device, equipped with batteries;
- 2、 Open shake assistant (iOS download in the APP Store, the android APP Store download), iOS as for example in figure 1 below
- 3、 Search and connected devices: (1) search abeacon through shake assistant software; (2) in the search list, select you to configure the Beacon, below we abeacon\_38DF, for example; (3) as shown in figure 2, click "abeacon\_38DF", enter the connection as shown in figure 3.
- 4、 Click on to modify the equipment into the interface as shown in figure 3; (5) click "UUID/Major/Minor", delete the data above, in the corresponding dialog box enter the new "UUID/Major/Minor"; (6) input your "UUID/Major/Minor", click "save", enter the default password "195660," after the "success" to complete the operation;



FIG. 1



FIG. 2



FIG. 3

Download The IOS APP store



Download the android APP



## CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.



Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

## **FCC STATEMENT :**

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.

**Warning:** 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.

## **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.