

KBeacon App Instruction

Revision History

Version	Date	Change Description	Author
V1.0	2017/11/12	Initial draft for KBeaconTools	Adam
V1.1	2018/02/23	Name updating	Adam
V1.2	2018/03/08	Updating iBeacon/Eddystone URL/Eddystone UID/Eddystone TLM configuration	Adam
V1.2	2018/03/27	Updating RSSI value setting	Adam
V2.0	2018/10/02	App Interface updating	Claire
V3.0	2019/10/15	Name updating&App Interface updating	Claire
V3.1	2019/11/10	Add trigger sensor	Hogen

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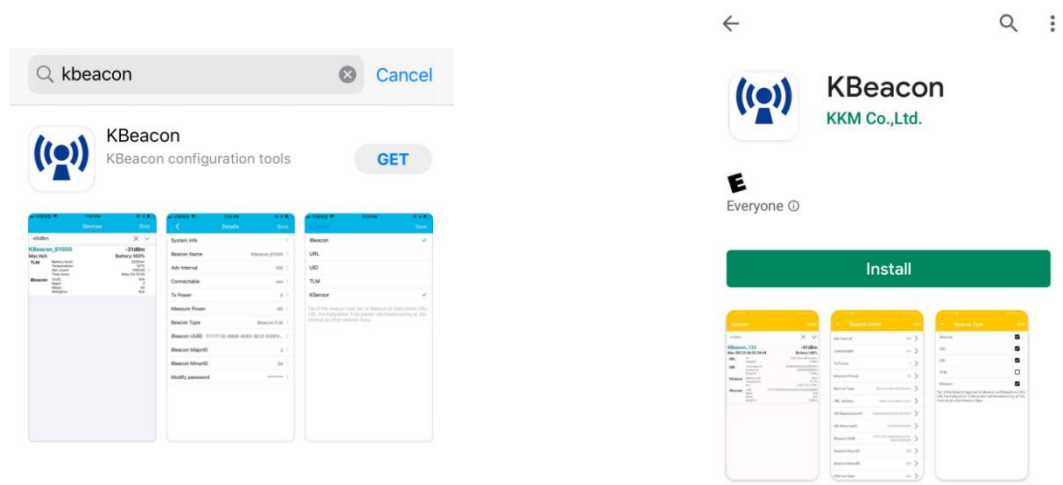
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1. Download KBeacon App

Download the App 'KBeacon' from iOS App Store or Android Google Play or scan the QR code below to install.



iOS App



Android App

Minimum requirements

A mobile phone with *Bluetooth* 4.0 support is needed. For Android devices, Android version 5.1 or newer. For iOS devices, iOS version 10.0 or newer.

2. How to connect KBeacon device to KBeacon App

Kindly note: Please make sure your KBeacon device is with battery already.

'KBeacon' App currently only works with KBeacon model K21, K3, K8

Enable your smart phone's Bluetooth and run the App 'KBeacon'.

2.1. Turn on KBeacon

- **KBeacon with button (Including model K1/K11/K21/K5)**

The factory setting of KBeacon with button is OFF. Long press the button(till the LED light starts flashing) to turn KBeacon ON.

- **KBeacon without button (Including model K51/K3/K8)**

The factory setting of KBeacon without button is ON.



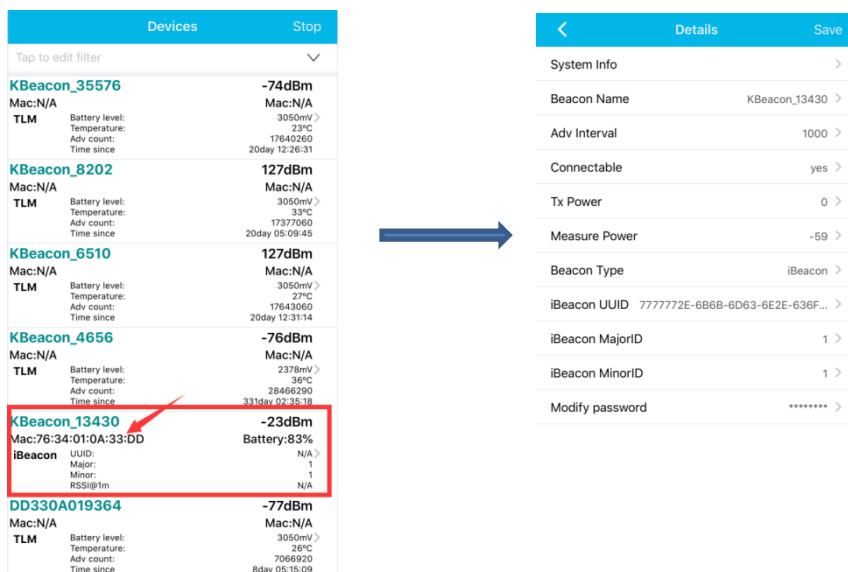
2.2. Connect KBeacon

Let's use a K21 (MAC Address: DD330A013476) to demonstrate:

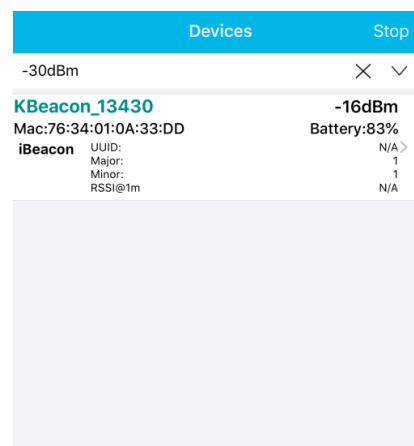
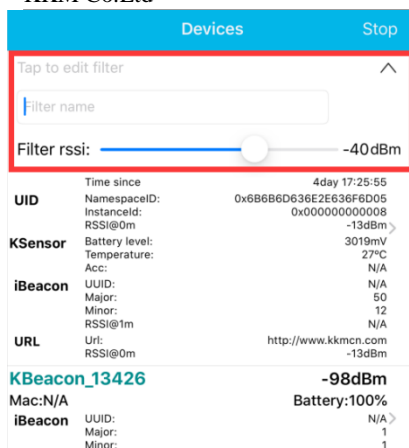


While KBeacon is ON, KBeacon App can scan the device's Bluetooth signal, then the device will be displayed on the device list page.

Find the corresponding KBeacon on the App according to its MAC address, Tap it, it will start connecting and jump to the configuration page (see pictures below).



- If there are too many KBeacon devices shown on the device list, but you want to search certain one KBeacon easily, try to filter name or filter rssi.



Put the KBeacon device close to your phone(within 10cm range). Tap 'Filter rssi' and set the rssi to -30~-40dBm, then only the KBeacon next to your phone can be scanned and shown on the device list page.

3. How to configure KBeacon

KBeacon supports five protocols :

- **iBeacon**
- **Eddystone URL**
- **Eddystone UID**
- **Eddystone TLM**
- **KSensor**

3.1. How to configure iBeacon and Eddystone

(Take iBeacon as an example)

Tap: Beacon Type—> iBeacon—> Save—> Return



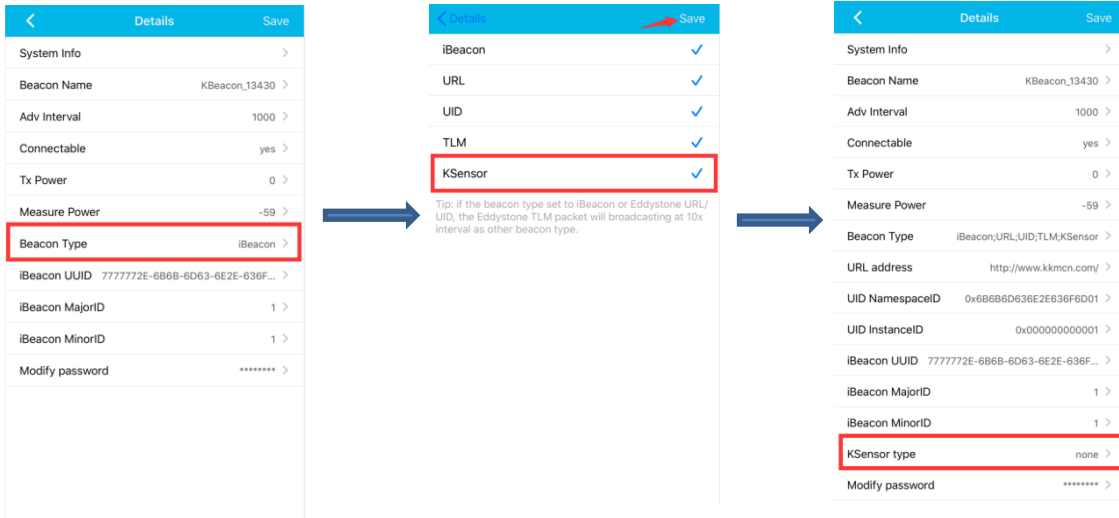
UUID, Major ID, Minor ID can also be configured in the App.

Eddystone URL, UID, TLM can be modified by above same steps

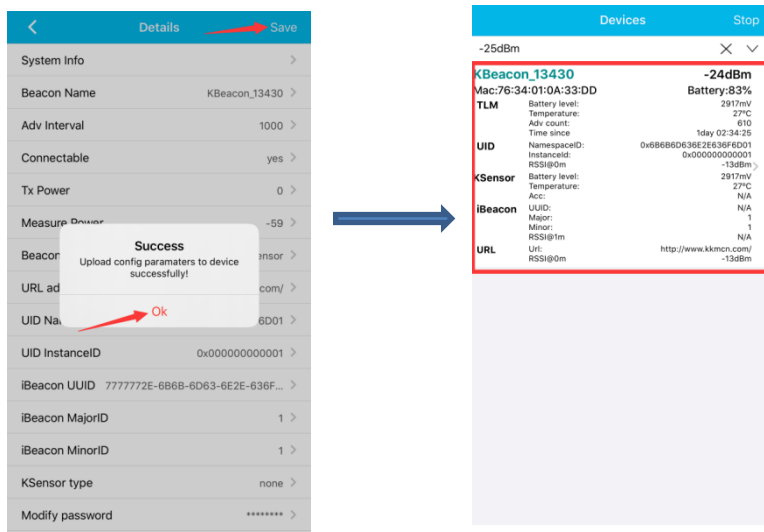
3.2. How to configure KSensor

KSensor is KKM self-defined protocol, it includes battery level and temperature sensor and acceleration sensor information.

Tap: Beacon Type—> KSensor—> Save—> Return



After the parameters that need to be changed are modified, Tap: Save—> Ok—> return, and the all the parameters can be shown on the scan list.



3.3. How to enable trigger

For KBeacon device that have acceleration sensor, you can set a Trigger, such as KBeacon starts different iBeacon UUID broadcasting and last 60 seconds when detects movement.

The different UUID = current iBeacon UUID + 1;

Example:

We can set the KBeacon broadcasting iBeacon packet at low interval (3 seconds). And we set a trigger base on motion;

The device will start broadcasting iBeacon with different UUID at quick interval (0.2seconds) when it detected motion.

The app can monitor two iBeacon UUID to identify the device's status. The low interval UUID indicates the KBeacon was alive and normal, the quick interval UUID indicate it has detected motion.

The image shows two screenshots from the KBeacon app. The left screenshot is the 'Beacon Detail' screen, which has a blue header with a back arrow, 'Beacon Detail', and a 'SAVE' button. It contains a list of configuration fields: Beacon Name (KBeacon_18009), Adv Interval (3000), Adv Flags (1), Tx Power (0), Measure Power (-59), Beacon Type (iBeacon), iBeacon UUID (7777772E-6B6B-6D63-6E2E-636F6D000001), iBeacon MajorID (1), iBeacon MinorID (1), Trigger Command, and Modify password (*****). A red arrow points to the 'Trigger Command' field. The right screenshot is the 'Trigger Command' screen, which has a blue header with a back arrow, 'Trigger Command', and a 'SEND' button. It contains a checkbox for 'Adv base on motion' which is checked, and a note: '1. Check 'Adv base on motion' if you want the beacon start different advertisement when it detected motion.' A blue arrow points from the 'Trigger Command' field in the 'Beacon Detail' screen to the 'Trigger Command' screen.

Beacon Detail	
Beacon Name	KBeacon_18009
Adv Interval	3000
Adv Flags	1
Tx Power	0
Measure Power	-59
Beacon Type	iBeacon
iBeacon UUID	7777772E-6B6B-6D63-6E2E-636F6D000001
iBeacon MajorID	1
iBeacon MinorID	1
Trigger Command	
Modify password	*****

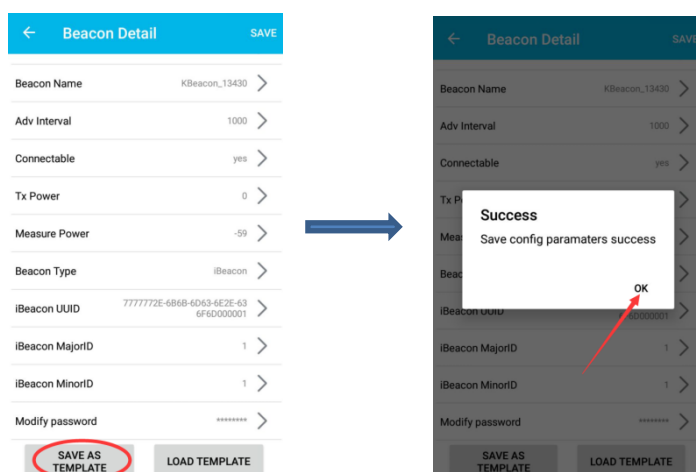
Trigger Command	
Adv base on motion	<input checked="" type="checkbox"/>
1. Check 'Adv base on motion' if you want the beacon start different advertisement when it detected motion.	

Tap: Trigger Command—> Adv base on motion—> Send

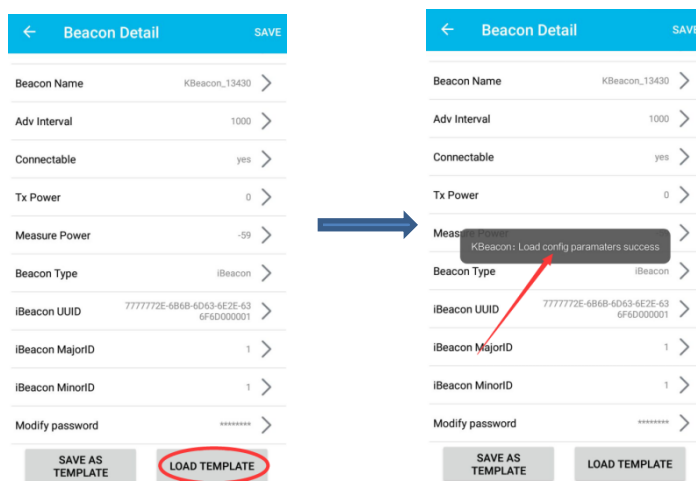
4. Save as template and load template

If a batch of KBeacon devices are to be configured with the same parameters, 'SAVE AS TEMPLATE' and 'LOAD TEMPLATE' functions can help saving a lot of time.

Step 1: Configure one KBeacon and Save template

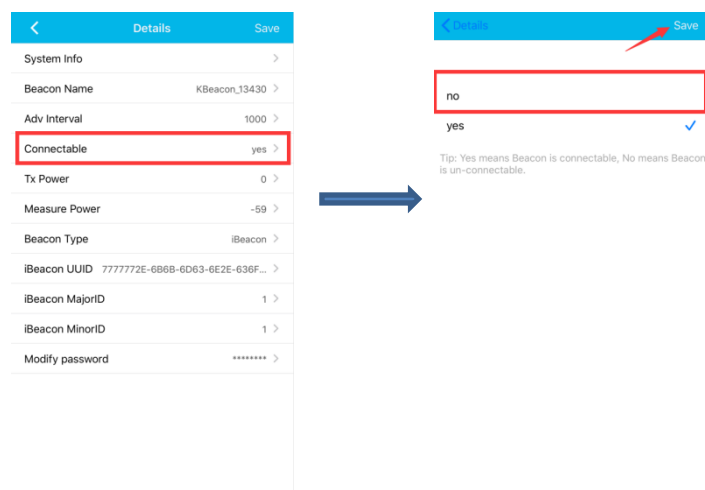


Step 2: For the rest of the KBeacon in the same batch, load template to every one of them.



5. Unconnectable mode

KBeacon can be set unconnectable. Tap: Connectable—> no—> Save.



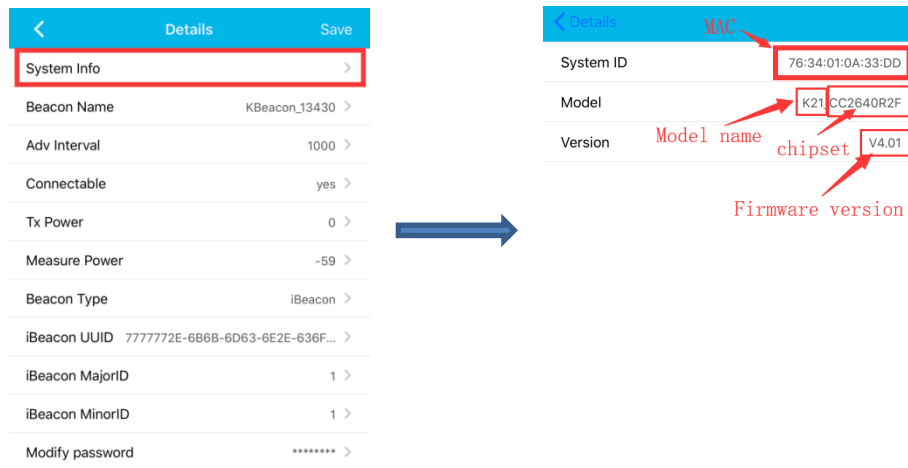
Please note: If KBeacon is set to be unconnectable, this KBeacon signal can be scanned, but it will not be able to be connected and configured. (in case other people connect KBeacon and configure the parameter without permission).

Question: How can I configure KBeacon again if it was set to be unconnectable?

- For KBeacon with button: click the button or re-install battery.
- For KBeacon without button: Re-install battery

6. System Info

‘System Info’ describes the detailed information of the connected KBeacon device.



7. Remark

Parameters such as Beacon Name, Adverstising Interval, Tx power etc can be easily configured on KBeacon App. These parameters configuration won't be demonstrated here. If there are any questions, please feel free to contact KKM.

Thank you for your support.