

# Base Station Beacon DS-Beacon-06 User Manual



Product name	Base Station iBeacon
Product model	DS-Beacon-06 A/B/C/D
Version	V1.0
Release time	2020/11/26

Version Information

Revise	Revised proposal	Data	Comment
V1.0			Initial release

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## I . Product Introduction :

The Base Station DS-Beacon-06A/B/C/D developed by DEASINO Technology supports accelerometer sensor, Temperature & Humidity sensor, Pressure sensor, Noise sensor, Light sensor selection, various sensors can be used to detect the environmental status and collect a large amount of data. A button switch and an indicator light. The product uses iBeacon broadcast by default and support multi-channel broadcast. Each channel can customize broadcast power, broadcast interval and channel parameters, configurable connection password and sensor sampling time. The case is made of ABS plastic, which is exquisite and beautiful as a whole. It is convenient to replace the battery with the rotary battery back cover clasp.



Model	Sensor
DS-Beacon-06 A	6 axis accelerometer sensor and Gyro sensor, Temperature & Humidity sensor, Pressure & Temperature sensor, Light sensor
DS-Beacon-06 B	Noise sensor
DS-Beacon-06 C	Acceleration sensor, Temperature & Humidity sensor, Light sensor
DS-Beacon-06 D	Acceleration sensor

## II. Product Features:

- ✧ Support iBeacon protocol
- ✧ Use nRF52 Series Chip
- ✧ The broadcasting distance can reach 100 M
- ✧ Switching function、 Low voltage alarm function、 Support Accelerometer
- ✧ Support sensor data broadcast
- ✧ Set Bluetooth broadcast parameters and sensor sampling time

## III. Application Range:

Indoor positioning of shopping malls, airports and other large public places; Online explanation of tourist attractions, museums, etc., Check in for exhibitions, forums and offices. Location based real-time message push, such as live information, conference process sharing, etc., Audience interaction such as concerts and large-scale events.

IV. Physical Property:

<b>Model</b>	DS-Beacon-06
<b>Size</b>	25× 15mm
<b>Weight</b>	24(g)
<b>Battery Model</b>	Disposable lithium-manganese dioxide batteries
<b>Supply Voltage</b>	DC 3.0 V
<b>Housing Material</b>	ABS
<b>Housing Color</b>	White

V. Electrical Specification:

<b>Quiescent Current</b>	≤3 uA
<b>Peak Current</b>	5.5 mA
<b>Average Current</b>	33uA
<b>Battery Model</b>	CR2450
<b>Battery Capacity</b>	520 mAh
<b>Operating Temperature</b>	-20°C ~+60°C
<b>Working Hours</b>	2 Years
<b>Bluetooth Stack</b>	5.2
<b>Broadcasting Power</b>	0 dBm
<b>Broadcasting Frequency</b>	1000ms
<b>Transmission Distance</b>	100M in open environment
<b>Security</b>	The default connection password is 000000

VI. Technical Parameters:

<b>Communication Protocol</b>	Bluetooth Low Energy 5. 2
<b>Broadcasting Power</b>	-40 +4dBm, Default 0 dBm
<b>Broadcasting Frequency</b>	40ms~10s, Default 1000ms
<b>Broadcasting Distance</b>	Can reach 100M (in open environment)
<b>Security</b>	Support password modification parameters; Restart and unconnected mode; Support app shutdown; Anti malicious connection function

VII. Default Parameters:

1. iBeacon Program default parameters

Parameter	Name	Default
UUID	Device ID	184f2020-1126-1815-87A5-F6D0BD9C5D00
Major	Major	0
Minor	Minor	1
Measured power	Power Adjustment	-54dBm
Transmission Power	Transmitted Power	0dBm
Change Password	Change Password	000000 (only support for ASCII Character)
Broadcasting Interval	Broadcasting period	1000ms
iBeacon Name	Device Name	3characters, 06 A/B/C/D
Connection Mode	Connection mode	Yes (Connectable mode) No (Unconnectable mode)
Soft Reboot	Software reset	000000 (Same as password))
Battery Service	Battery Level	Battery icon display, real-time detection, full charge is 100%
6 axis accelerometer sensor	Status	open
	sampling interval	2 seconds
Light sensor	Status	open
	sampling interval	60 seconds
Noise sensor	Status	open
	sampling interval	60 seconds
Temperature&Humidity sensor	Status	open
	sampling interval	60 seconds
Pressure sensor	Status	open
	sampling interval	30 seconds

2. DS-Beacon-06 Program default parameters

Frame category	Frame information	Frame content (Default value)	Frame configuration	Default value
iBeacon	UUID	184f2020-1013-44C3-87A5-F6D0BD9C5D00	Broadcast interval	1000ms
	Major	0	Calibration distance	-54dBm
(open)	Minor	1	Broadcast power	0dBm
ACC	MAC Address	FACTORY SETTING	Broadcast interval	1000ms
	Broadcast interval	40ms – 10s	Calibration distance	-54dBm
	Battery Level	0 – 100%	Broadcast power	0dBm
(open)				

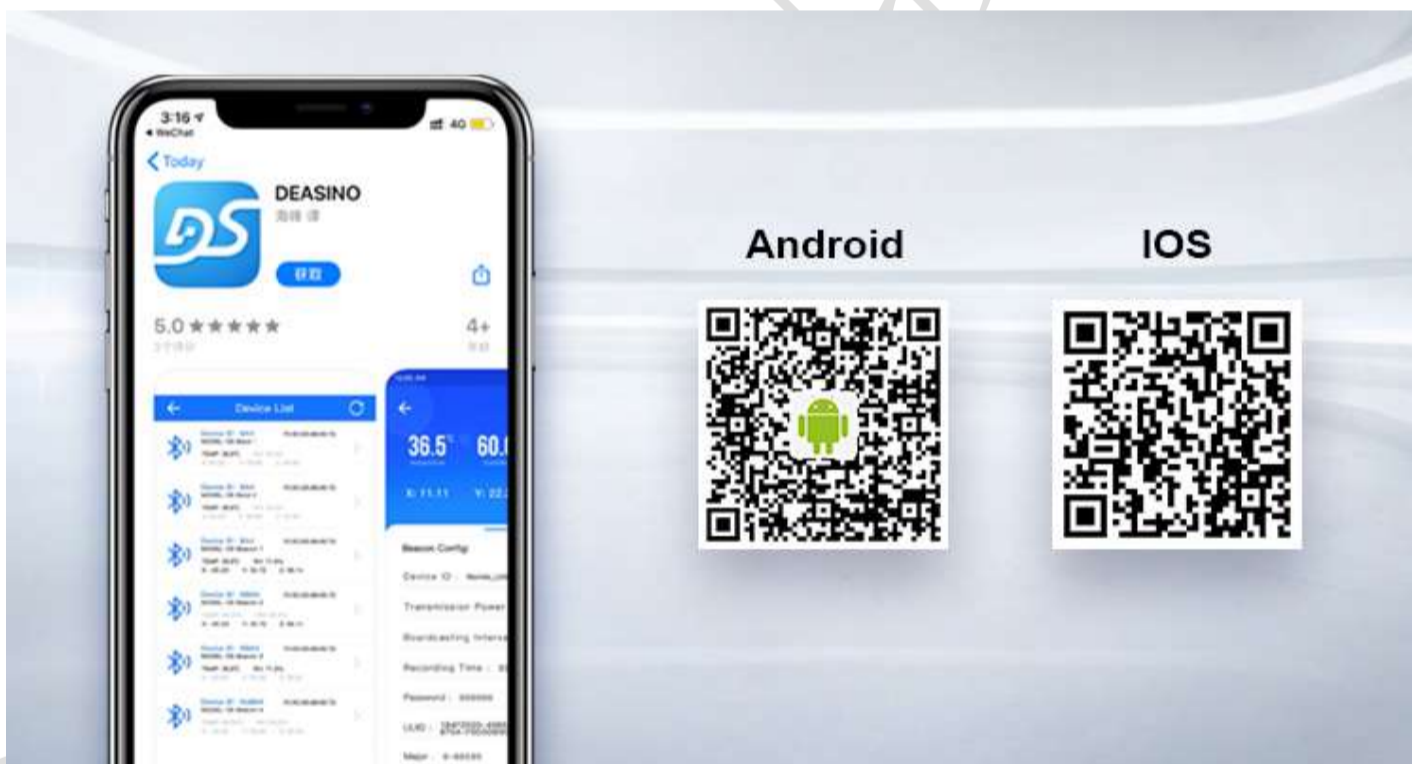
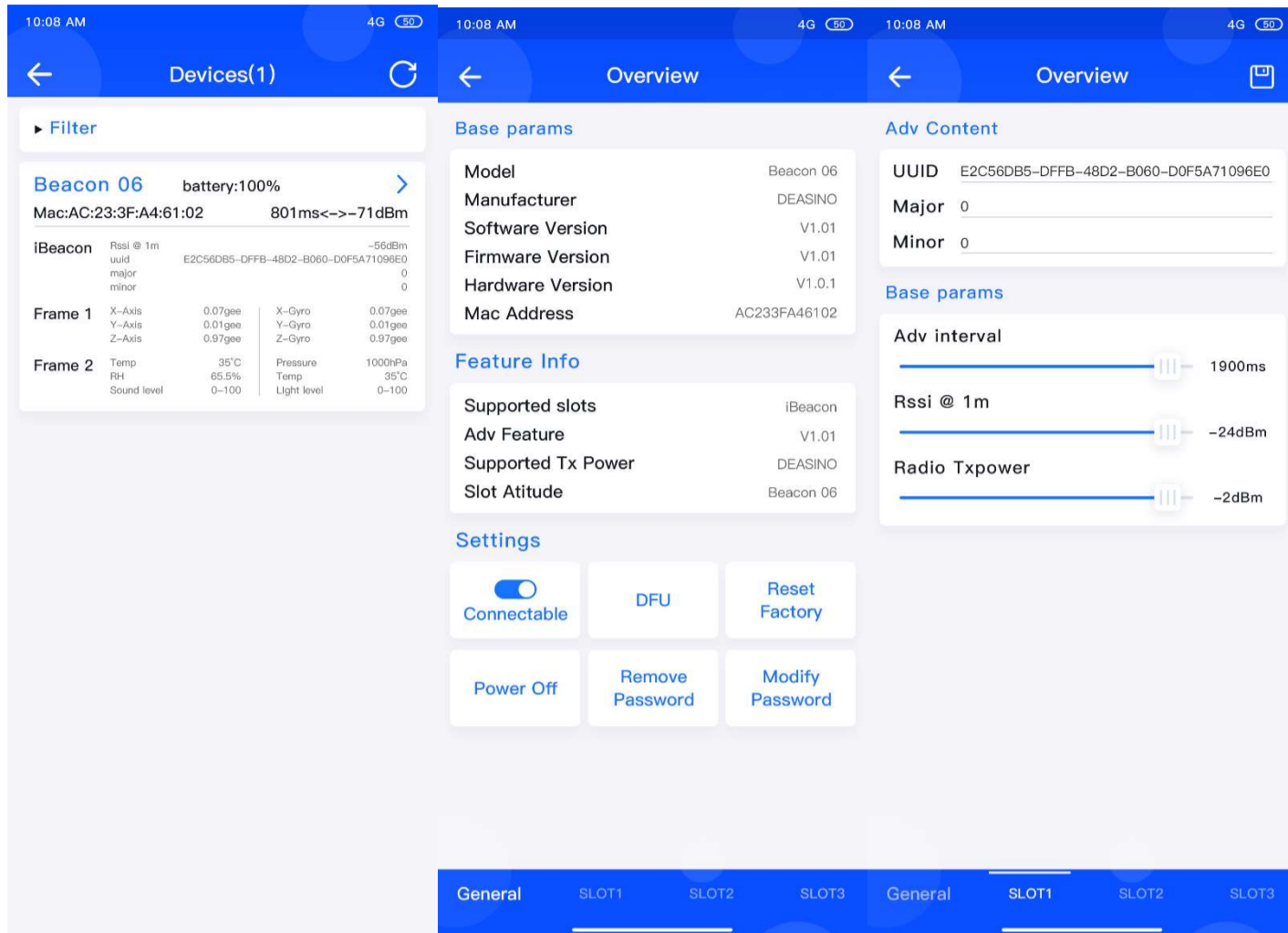


INFO	MAC Address	FACTORY SETTING	Broadcast interval	1000ms
	Broadcast interval	40ms – 10s	Calibration distance	-54dBm
	Battery Level	0 – 100%	Broadcast power	0dBm
(open)				
Password	000000 (default)		Connection mode	1 Connectable

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VIII. App usage and support devices:

1. App usage, Bluetooth scanning->Enter password connection->Configuration information



2. Support devices

Support equipment system	Support equipment model
IOS 7.0 and above	iPhone 4S, iPhone 5/5C/5s, iPhone6/6Plus/6S/6SPlus, iPhone 7/7Plus, iPad mini/mini2/4/Air/Pro
Android 4.3 and above	Samsung S4/S5/S6/S7, Note 3/4/5... Xiaomi M3/4/5... Huawei P7/8/9, Honor 6/7/8... Bluetooth 4.0 and Android 4.3 or above are supported

IX. Functional Description:



1. On/off function: long press for 3 seconds, startup succeeds, green light flashes 3 times; Under the power on state, hold down for three seconds and the green light will flash five times. During the green light flashing, click the button, the light will be on for one second and the power off will be successful.
2. Support Bluetooth to set broadcast parameters (iBeacon UUID / Major / Minor) broadcast interval, Radio Tx power, RSSI@1m, sensor sampling time.
3. Connected to Bluetooth successfully, green light flash twice; Disconnect Bluetooth and the green light will flash three times.
4. Low power prompt, double flash 3 times per minute, 10 seconds interval.

## X. Certification Information:

CE Certificate number: (Application, update after completion)  
FCC ID : 2AV9TDS-BEACON-06

## XI. Product Claims:

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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

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

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.