

AB401/AB402 Bluetooth Beacon User Guide



Applicable Model: T399L

Change History




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2 Product Overview

The AB401/AB402 is a round low-power Bluetooth beacon with a plastic outer case for positioning and marketing. When you lay your hand on this device, you feel comfortable. This unit features twisted design, so that the battery can be replaced easily. It can be fixed by double-sided tape or magnet.

The device supports the following functions:

- Push offline advertisements or coupons for precision marketing.
- Implement indoor positioning in public places such as shopping malls and airports.
- Support WeChat shake.
- Support online explanations for tourist attractions and museums.
- Sign your name at exhibitions, forums, and offices.
- Push location-based messages in real time, such as on-site files and the meeting process.
- Support audience interaction at concerts and major events.

The highlights of the device are as follows:

- Built-in battery with five years of battery life
- At most 16 Bluetooth beacons simultaneously supported by the T399L-GFB5

3 Main Device and Accessories



∅ 50 mm x 22.7 mm

AB401



AB402

4 Product Specifications

Item	AB401 Specifications	AB402 Specifications
Water resistance rating	IP64	IP66
Outer case	PC1100	ABS + Silicone
Dimension	∅ 50 mm x 22.7 mm	72 mm x 72 mm x 23 mm
Weight	39.5g (including the battery) 45.1g (including the battery and magnet)	106g (excluding the battery) 145g (including the battery)
Battery	2 ER14250 batteries (lithium thionyl chloride battery) 2400 mAh	4 AA batteries
Voltage	3.6 V DC	3.0 V DC
How to install	Installed by double-sided tape or magnet	Installed by double-sided tape
Quiescent current	≤ 3 uA	≤ 3 uA
Peak current	< 11 mA	13 mA
Average current	46 uA (0 dBm/500 ms)	109 uA (4 dBm/300 ms)
Operating temperature	-30°C to 60°C	-30°C to 60°C
Service life	About 5 years	About 5 years
How to communicate	BLE 4.0	BLE 4.0/BLE 4.2
Broadcasting power	-30 dBm to 4 dBm (0 dBm by default)	-30 dBm to 4 dBm (4 dBm by default)
Broadcasting frequency	100 ms to 10s (500 ms by default)	100 ms to 10s (300 ms by default)
Transmission distance	Maximum transmission distance in open areas: 150 meters	Maximum transmission distance in open areas: 240 meters

5 Operation Instructions

To turn on the device, press and hold down the O/I button on the side of the device for five seconds. Then the LED indicator is on for five seconds.

To turn off the device, press and hold down the O/I button on the side of the device for five seconds. Then the LED indicator blinks for five times.

5.1 Setting the Bluetooth Beacon

There are three Bluetooth modes as follows:

Broadcasting mode (by default): Used to connect Meitrack Manager app.

Scanning mode: indicates the main device mode and used to detect nearby Bluetooth devices. If the ACC (input 2) is triggered, the device is switched to broadcasting mode automatically. If the Meitrack Manager app fails to be connected within one minute, the device is switched to scanning mode automatically.

Off: Disable the Bluetooth function.

Bluetooth Settings

Mode: Boardcasting mod

Broadcast name: 868817040201061 Broadcasting interval(ms): 1000

Bluetooth password: Manufacturer specific data

Company Identifier Code: 0000 Custom advertising data contents:

Set

Set Bluetooth beacon parameters.

Alarm when signal lost for(secs): If the Bluetooth beacon fails to be detected within the specified period, an alert is generated.

Lost: Determine whether output 1 or output 2 is controlled when Bluetooth beacon signals are lost.

Trigger OUT1/Trigger OUT2: Output 1 or output 2 is controlled when Bluetooth beacon signals are lost.

Report Data: Upload Bluetooth data or not.

MAC Address: indicates the MAC code of the Bluetooth beacon, as shown in the following figure.

iBeacon Parameters Settings

Alarm when signal lost for(secs): 30

Lost

Trigger OUT1 Trigger OUT2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----

Report Data

Device Name: indoor

MAC Address: AC:23:3F:59:26:86

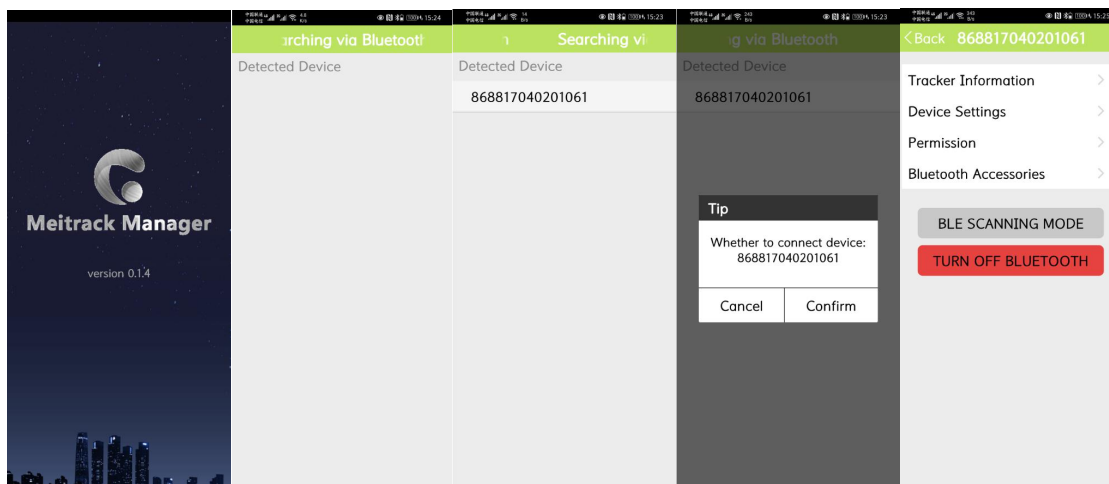
Set

Note: If the MAC code of the Bluetooth beacon fails to be found, set it by Meitrack Manager app.

Configuring the Meitrack Manager App

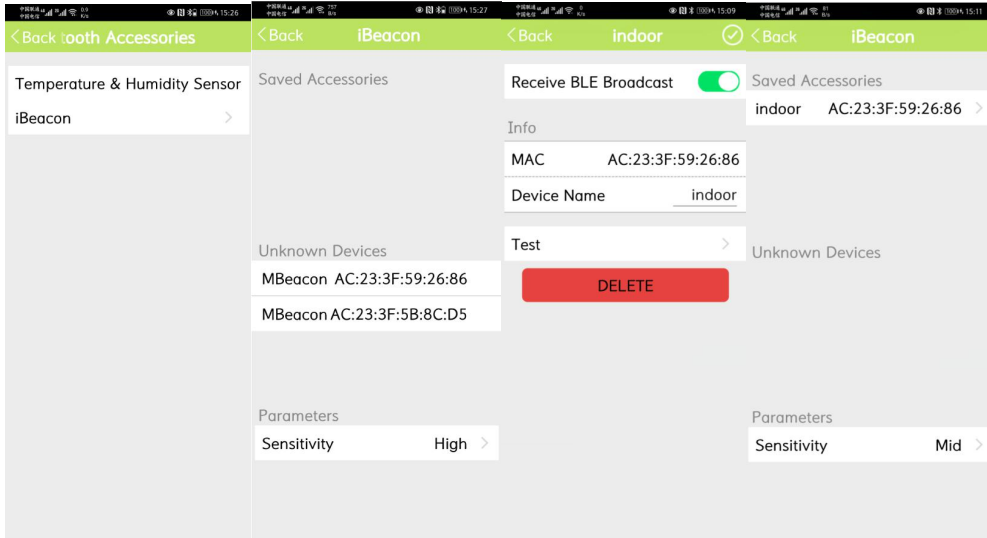
1) Start the Meitrack Manager app. Trackers will be detected automatically. After a tracker is detected, select one and click **Confirm**. Then the device configuration page is displayed.

If a tracker fails to be detected, connect the white cable (input 2) of the device to the power cable (12–36 V) and the analog device to ACC ignition cable. Then the device is switched to broadcasting mode for one minute.



2) Set Bluetooth beacon parameters.

Select **iBeacon**. Nearby Bluetooth beacons will be detected automatically. Then select one and set Bluetooth beacon parameters as required, as shown in the following figures.



6 Installation Instructions

6.1 Warnings

The device can be stucked on the surface of the following materials: aluminum, galvanized steel, enamel steel, stainless steel, ceramics, glass/epoxy resins, acrylic acid, PBT, ABS, PC, and hard PVC.

Clean the adhesive surface. Please make sure that the adhesive surface is dry and dust-free.

Please stick the device at a temperature of 21°C to 38°C.

Note: The device is operated in a low temperature. Before sticking the device, heat the adhesive surface by using a blower, or stick it at a suitable temperature for more than half an hour and then use the device in a low temperature. After sticking the device, press the device for 1–2 seconds and repeat it for several times to ensure that the device is stucked properly.

If you have any questions, do not hesitate to email us at info@meitrack.com.