Application Note
Blue LITE TOUCH

New Ibeacon configuration

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1. ABOUT THE BLUE LITE TOUCH

The Blue LITE TOUCH is the ideal beacon for identifying drivers and passengers in vehicles.

100% autonomous, this beacon offers up to 5 years of autonomy, as well as the possibility for users to replace the battery themselves.

Equipped with a push-button on the back side, this Bluetooth beacon makes it possible to indicate whether the vehicle is being used for private or professional purposes, and also to differentiate between the driver and other passengers. It's the perfect answer to the security and confidentiality challenges of fleet management.

2. REASONS FOR THIS NOTE

The goal of this note is to provide all the details regarding the new configuration of the Blue LITE TOUCH. This new configuration is implemented from February 2025 to offer a better usage experience.

This new configuration and its improved behavior will be referenced under the reference IDF28255-02A.

3. DESCRIPTION OF NEW CONFIGURATION

The BLE frame emission is done in the **iBeacon format**, and the button-clicking information is coded in the last Low-byte of the UUID (16th byte):

- When the button status is "clicked", the corresponding value is **0x01**
- When the button status is "released", the corresponding value is **0x00**
- By default, the first 15 bytes of the UUID and the MAJOR ID have a fixed value.
- The first 15 bytes of UUID is: 0x(**45 4C 41 20 49 4E 4E 4F 56 41 54 49 4F 4E 20**)
- The MAJOR ID is coded in 4 hexadecimal digits. Its fixed value is 0x(**32 34**)
- The MINOR ID is used to create series of tag individual names, so it is incremented with the series of produced tags. The MINOR value is coded in 4 hexadecimal digits, starting from 0x(**00 01**)

The click on the button is secured by an **antibounce** system: **the pressure on the button must be maintained for at least 750ms** before the click is considered by the device.

As feedback information, the tag LED blinks to acknowledge the clicking.

To make sure that the Gateway, smartphone or tracker duly receives the BLE information, **the "clicked" button state is memorized for 5 seconds.**

During the "clicked button" time, the emit period is by default accelerated to 500ms.

When the button state is "released", the emit period is slower to save on battery life, configured at 10 seconds.

The particular NAME field in the ELA configuration remains available, even if this field can be only seen by a NFC reading or thanks to the SCAN RESPONSE mechanism. Actually, by default, this field is not contained in the iBeacon format.

The NAME format is composed of: L TO XXXX YYYY

XXXX being the MAJOR ID and YYYY being the 4 digits of MINOR ID.

Few settings can be customized through our Custom Settings service (TAG SET02):

- the first 15-byte part of UUID,
- the MAJOR ID,
- the MINOR ID,
- the emitting period for "clicked button" state,
- the emitting period for "released button" state.

4. DESCRIPTION OF PRODUCT LABEL & DATAMATRIX

The BLUE LITE TOUCH label looks as below:

The number 123A corresponds to the MINOR data

The data coded on the DATAMATRIX present in this label contains the following information:

PRODUCT REFERENCE - MINOR

Example: IDF28255-02A – 123A

5. Blue LITE TOUCH Battery

The battery of Blue LITE TOUCH can be replaced by the user.

A tutorial video has been created to show how to replace easily the battery:
https://www.youtube.com/watch?v=ZMKXBY9TEnM

6. General information of Blue LITE TOUCH

Please refer to the product datasheet for more details related to this product Blue LITE TOUCH

https://elainnovation.com/wp-content/uploads/2025/01/Product-Sheet_Blue-LITE-TOUCH_03A.pdf