ELA INNOVATION

QUICK START

BLE BEACONS & SENSORS

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1 PREREQUISITE

You recently bought ELA Innovation's beacons and/or sensors in order to test our products. In order to test our products you will need to download Device Manager software and to have the following equipment:

Set of beacons and/or sensors

NFC reader or smartphone with NFC function

2 DEVICE MANAGER INSTALLATION

The first step to realize is to install the Device Manager app, from which you can find the address to download below:

PC Version (Windows 10 required):
https://elainnovation.com/device-manager-suite/

For the PC version you need to download the app and then execute the file under administrator right, follow the standard instruction for installation and then restart the computer.

Android Version:
You can find the app on the google playstore.
https://play.google.com/store/apps/details?id=com.ela.mobileapp.elamobileapp

Click onto download and it should install itself, you absolutely need to accept the positioning from google.

Apple Version:
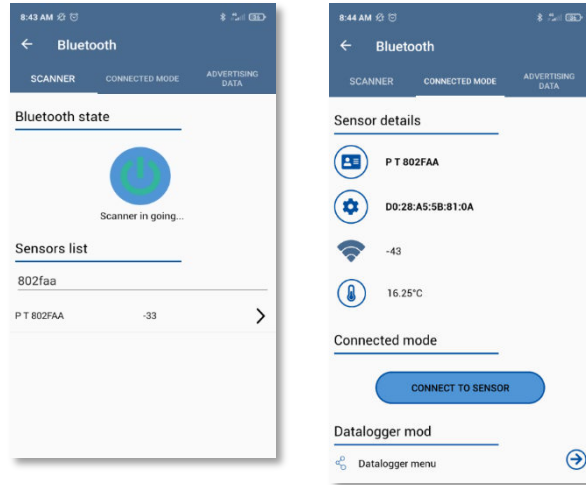You can find the app on the apple store.
https://apps.apple.com/fr/app/device-manager-mobile/id1511468809

Click onto download and it should install itself.

3 DEVICE MANAGER – MOBILE VERSION
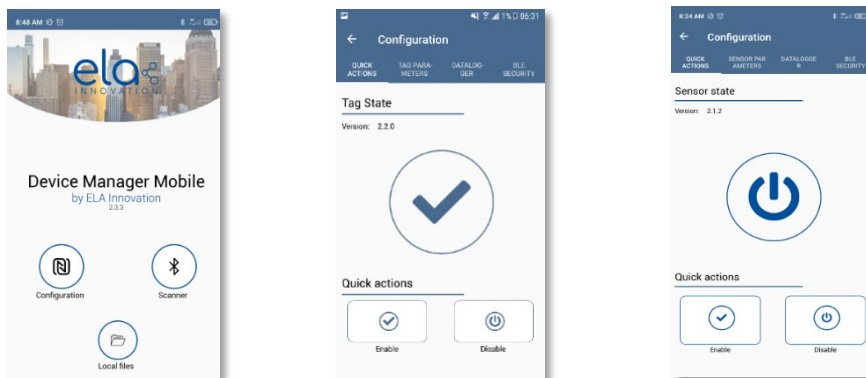
3.1 READING A TAG (BLE ONLY)

If you are willing to read a tag, you only need to be sure that the Bluetooth is activated, and then click onto the **scanner** part of Device Manager. You can use the search bar.

Then you have access to the advertising name, the MAC address and the sensors value.
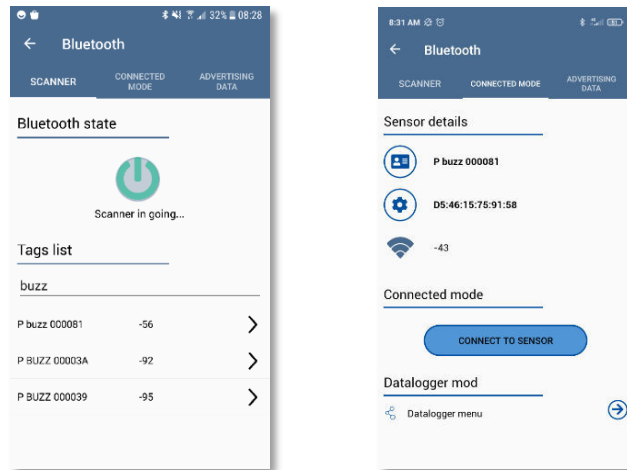
3.2 TURN ON/OFF A TAG

If you have a tag and you wish you turn it ON or OFF quickly, open Device Manager, then choose Configuration. Once in the configuration page, approach the top of the tag to the bottom of your smartphone to detect the NFC parameters. If you are using the iOS version, you will first need to choose "Scan" before reading the settings.
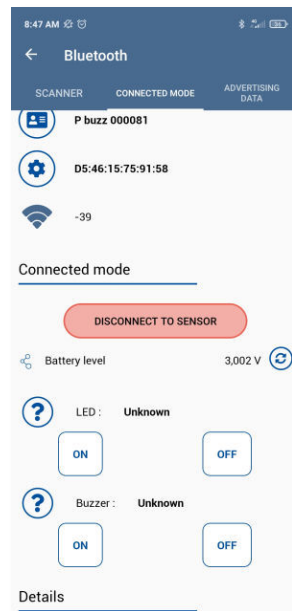

After you successfully read the tag state and parameters, you can choose "Quick actions" to quickly turn ON or OFF the tag. After clicking on one of these 2 actions, you will need to scan the tag again with the NFC chip to apply the modification.

3.3 TURN ON THE BUZZER OR LIGHTEN THE LED (BLE ONLY)

If you are willing to lighten the LED or to turn ON the buzzer, you need to use the **connected mode**. First of all you need to find your tag in the Bluetooth Scanner, then click **Connect to tag.**
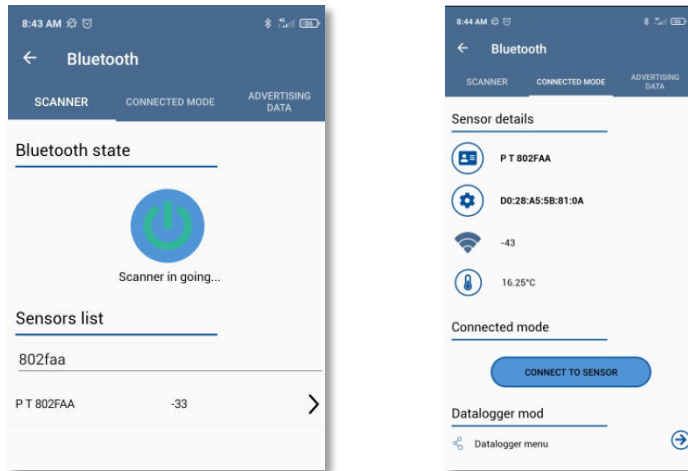

Once you are connected to the tag, you will be able to command the LED or the buzzer if the tag is equipped.
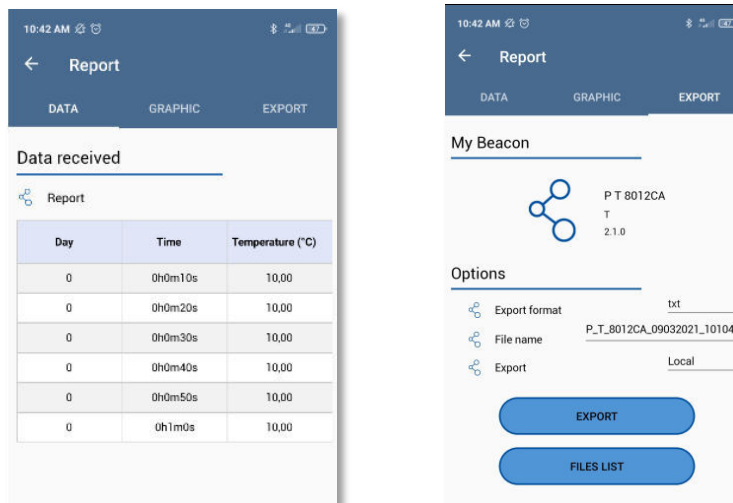
3.4 USE THE DATALOGGER (BLE ONLY)

If you are willing to see the values in the datalogger and download it, you need to use the connected mode.

First of all, find your tag with the Bluetooth Scanner

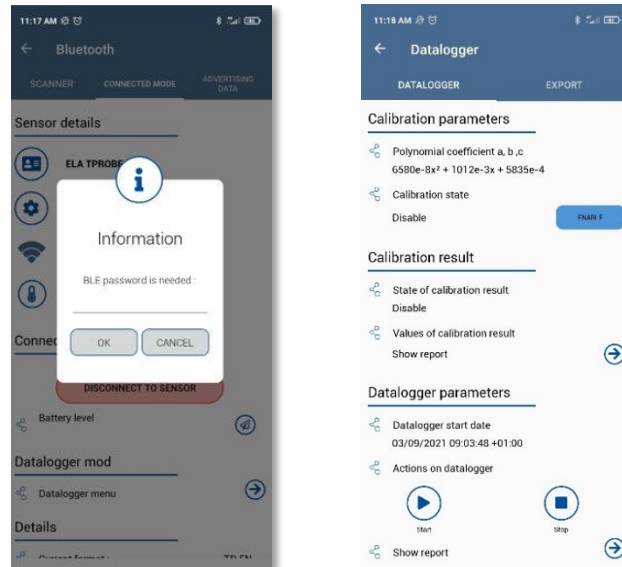Then choose **Connect to tag**, and click on the arrow **Datalogger Menu**

Example of a Blue Puck T data logger with a period of 10s. You also have the possibility to see a **graphic** of those data. If you want, you can download the file and export it. You will be able to:

- Choose the export format: txt, json or csv.
- Change the name of the file.
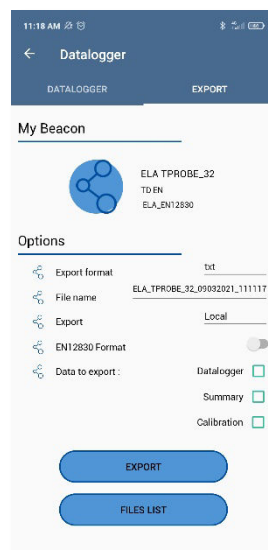- Download the file or your smartphone or send it through an e-mail.

3.5 EN 12830 DATALOGGER (BLE ONLY)

The EN 12830 tags has a specific datalogger. It can be protected by a password; you can enable or disable the calibration state, (the parameters can be changed in the NFC settings) See the calibration result report and start or stop the datalogger through the connected mode. To download the values, click on the arrow Show report in datalogger parameters.
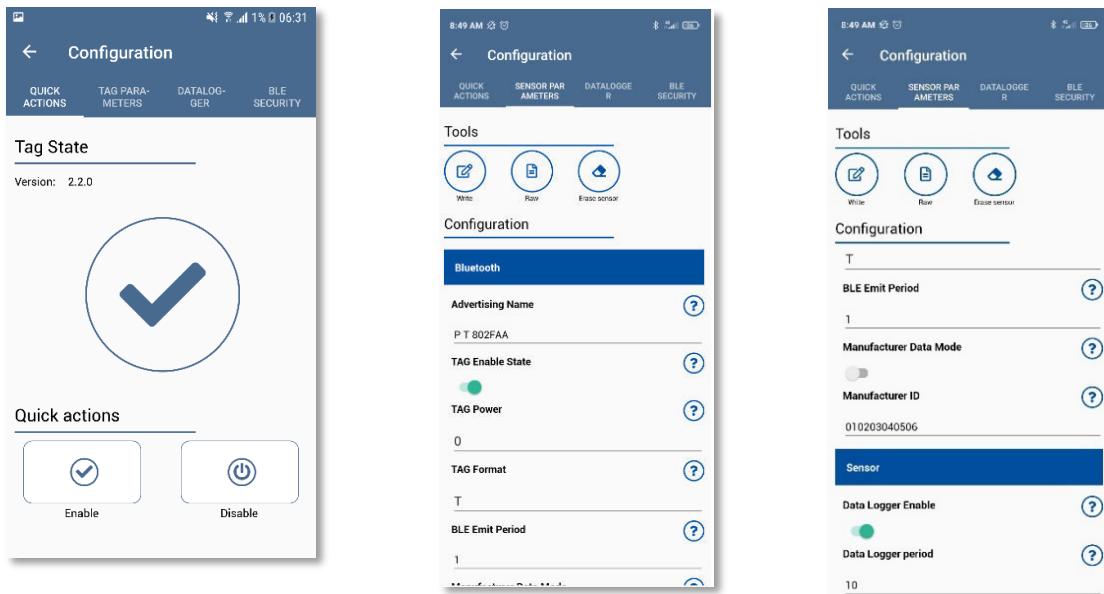

You can choose what you want to export: Datalogger, summary or calibration. You can also disable the EN12830 format in the file.

For more information about the EN 12830 datalogger, you can check our application note here:

3.6 CHANGE TAGS SETTINGS

If you are willing to change some settings in the tag such as the emit power, the format or to turn ON/OFF the datalogger, you need to open Device Manager with the NFC activated on your smartphone, then choose configuration. Once in the configuration tab, bring the tag close to the bottom of your cell phone and remove it after it has been read by the NFC chip. The current state of the tag will be shown. Choose tag parameters to enter the settings menu.

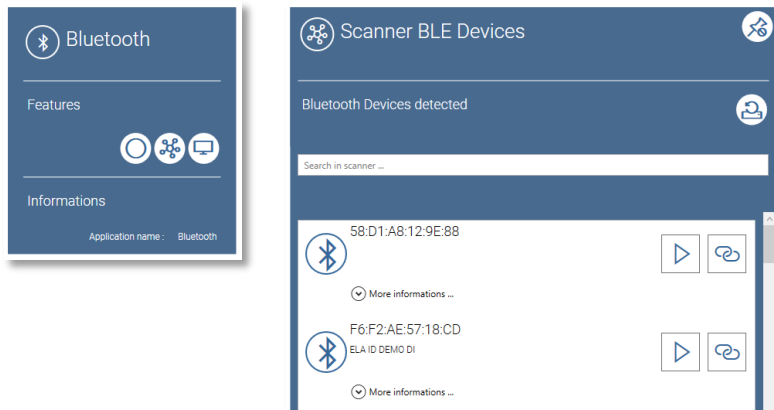To apply any modification, choose **Write**, then scan the tag with the NFC chip again.

4 DEVICE MANAGER – WINDOWS VERSION

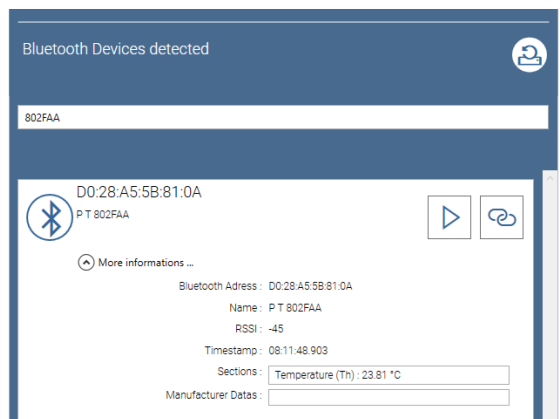## 4.1 READING A TAG (BLE ONLY)

If you are willing to read a tag, open Device Manager first. In readers, click on the play icon of the Bluetooth tab, and choose Bluetooth

Another Bluetooth tab will open, click on the icon to open the BLE scanner. Once the scanner is opened, you will have access to all the detected Bluetooth devices.
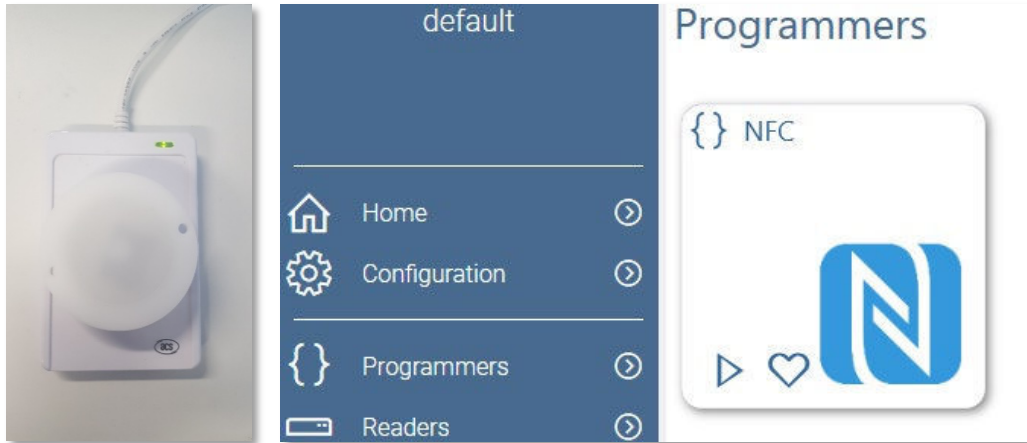

You can use the search bar to find the tag with its name or its MAC address. Once you find it, you can click on More information to get its data.
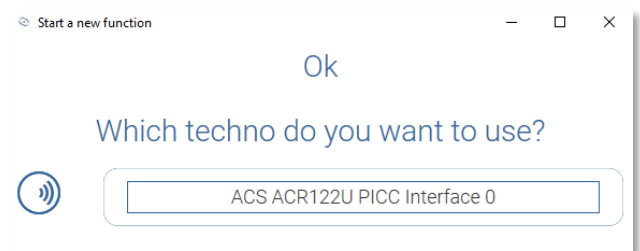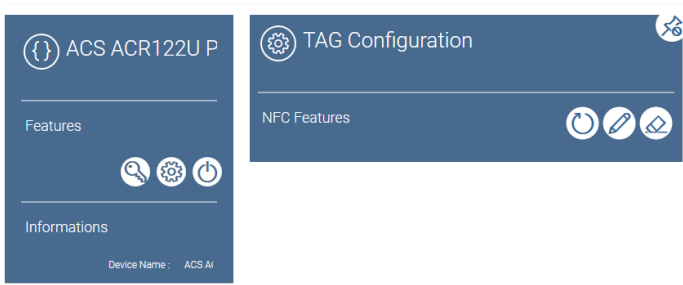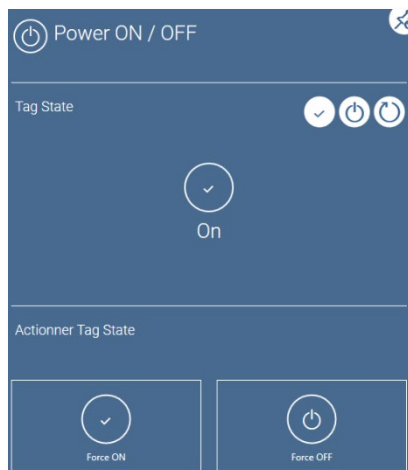
4.2 TURN ON/OFF A TAG

If you are willing to turn ON or OFF a tag, you need to put it on the NFC reader, and open Device Manager. The Readers LED should turn green and make a sound if the tag is detected properly. In Device Manager, click on the play icon in the NFC tab.

Choose the NFC reader and click on the power icon 🔘 to open the power ON/OFF tab.

In the power ON/OFF tab, click on the icon 🔄 to read the actual state of the tag. You can turn ON or OFF the tag by pressing the two buttons below. By choosing the two icons at the top right, you will activate the serial activation or disabling to turn ON or OFF many tags one by one.
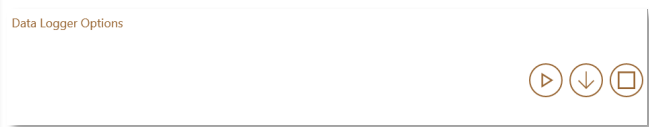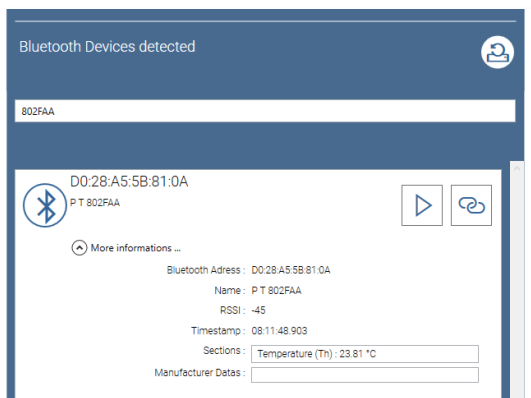
4.3 TURN ON THE BUZZER OR LIGHTEN THE LED (BLE ONLY)

If you are willing to lighten the LED or to turn ON the buzzer, you need to use the **connected mode**. First of all, you need to find your tag in the **Bluetooth Scanner**, then click on the icon to open Device Manager Connector. Once you are connected to the tag, in the features part, you will be able to send the commands to turn ON and OFF the LED and the buzzer and turn ON or OFF the output in case of a Blue Puck DO.
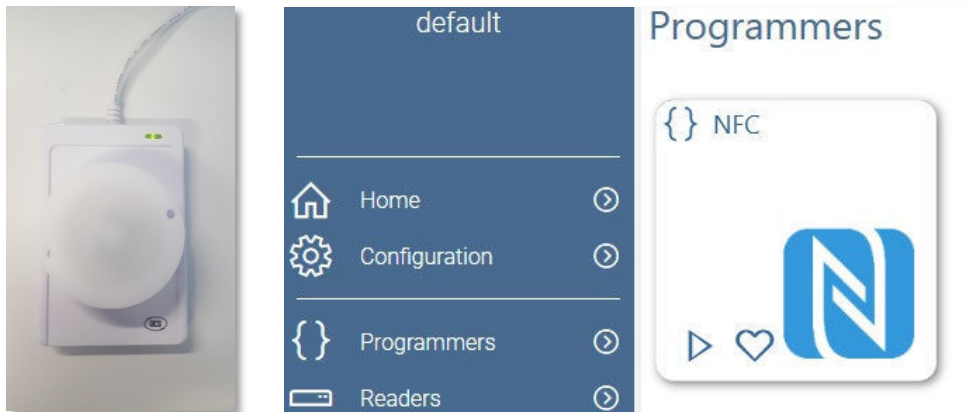
4.4 DOWNLOAD THE DATALOGGER (BLE ONLY)

If you have enabled the datalogger in the settings and you wish to download it, you first need to find your tag in the Bluetooth scanner, then enter the connecter mode. To enter this connected mode, click on the icon 🔗 . Once in the connected mode, you will find the data logger options.
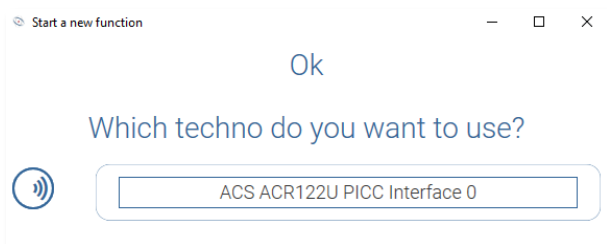
In the Data Logger options, you will be able to download it by clicking the icon in the middle.

4.5 CHANGE TAGS SETTINGS

If you are willing to change some settings in the tag such as the emit power, the format or to turn ON/OFF the datalogger, you need to put it on the NFC reader, and open Device Manager. The Readers LED should turn green and make a sound if the tag is detected properly. In Device Manager, click on the play icon in the NFC tab.

Choose the NFC reader and click on the configuration icon ⚙ to open the configuration tab.

Once in the configuration tab, click on the icon to read the configuration. Then you will be able to see the different parameters and modify them.

To apply any modification, click on the icon. ✏️

5 USEFULL DOCUMENTATIONS YOU MAY NEED

- Bluetooth Low Energy User Guide : https://elainnovation.com/wp-content/uploads/2021/01/BLE-Range-User-Guide-10C-EN.pdf

- Quuppa User Guide : https://elainnovation.com/wp-content/uploads/2020/10/QUUPPA-User-guide-02B-EN.pdf

- Wirepas Mesh localization User Guide : https://elainnovation.com/wp-content/uploads/2020/09/MESH-Localization-User-guide-01A-EN.pdf

- Wirepas Mesh sensors User Guide : https://elainnovation.com/wp-content/uploads/2021/01/MESH-Sensor-User-guide-01A-EN-1.pdf

- LoRa User Guide : https://elainnovation.com/wp-content/uploads/2021/01/My-LoRa-User-guide-03B-EN.pdf