

SDA Tag V1

first use instructions

V1.0

Read this first - important note

Please remember that SDA Tag is there to assist you and to prevent from being exposed to potential contamination. In order to minimize the risk of infection, please follow these guidelines:

- immediately react to SDA Tag's alerts
- cover your nose and mouth with a mask
- wash your hands often
- use wet wipes to clean your hands if no running water available
- cover your nose and mouth when coughing/sneezing if unmasked
- do not shake hands

Please remember that all the above are only able to minimize the risks of infection, **not prevent entirely.**

Getting started - general information

1. To configure your SDA Tags you will need an Android smartphone and SDA-configurator app available via Firebase
2. Each time 'Configure' button is pressed, then the app sends all current settings to the tags you selected.
3. It means that everything what is visible on screen (threshold distance, threshold rssi, alert lvl, active alert modes) the moment you press 'Configure' will become the new settings of your tag(s).
4. This means that you need to be extra careful when testing the app, because it may happen that by ticking/unticking/sliding you may accidentally override some of your previous desired settings.

Contents of the package

- 4 x SDA Tag each with a built-in Li-Po rechargeable battery
- 4 x USB / USB-C cable
- 4 x USB power adapter

You may use different accessories as long as they comply with 5V 2A.

Recommended mounting options

SDA Tags can be mounted on personnel by the use of:

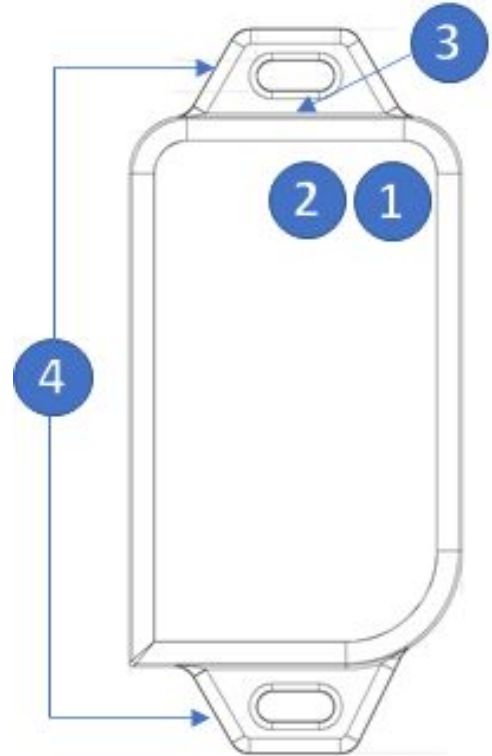
- neckstrap / lanyard / neckband
- armband holder
- flexible straps (can be also used to mount on a helmet)

When selecting a method and placement make sure that the LED is clearly visible and that the vibration is well received

Product overview

Here is a general view of Ubudu SDA Tag:

1. Red LED - will light up to alert proximity breach
2. Green LED - will light up with constant light when battery charging in progress. Will stop when battery is full charged
3. USB-C charging port - use to recharge the built-in battery
4. Mounting flanges - use to mount the tag to a neckstrap, carrying pouch, armbands, straps



Getting started

SDA Tags are sent inactivate to lower radio emission during transportation and prevent the battery from depleting before reaching destination.

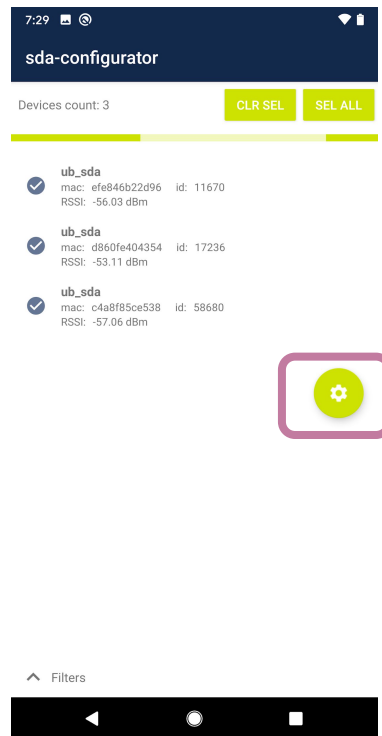
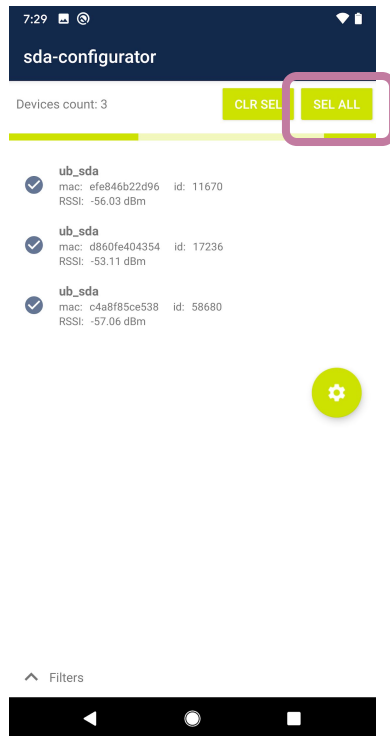
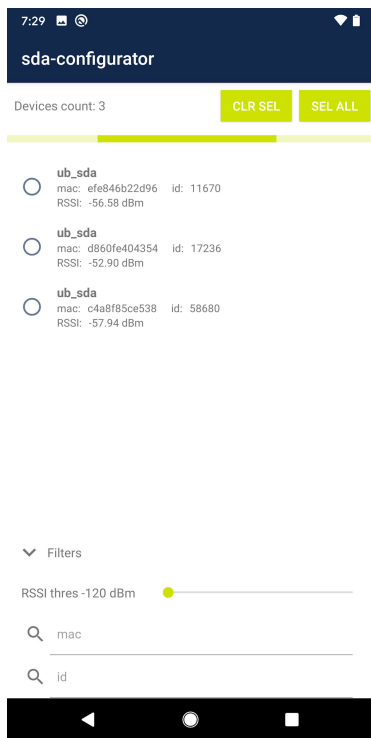
Before the first usage the devices need to be activated with SDA-configurator application. The same application can be also used to change the parameters of the tags and to deactivate them again later when no longer needed or to save battery.

Next pages will describe how to perform the activation of received devices

Getting started - tag activation

1. To start, you will need to download and install SDA-configuration app. When you do so, please open the app.
2. Please make sure that you enable Bluetooth connectivity on your mobile
3. You will see a list of all tags available nearby, listed by their distance and identified by their mac address and their unique 4 or 5-digit ID which is seen on the front label of the device.
4. Select the tags you wish to activate by touching and holding its ID. Multiple selection is available. If you wish to activate all the tags currently on your app list you may use 'Select all (SEL ALL)' button.
5. When you select a Tag (Tags) a 'Settings' icon will appear
6. Once all the tags you wish to activate are selected, please touch the "Settings' icon

Getting started - tag activation



Getting started - tag activation

1. On next screen you will see 'Selected devices count' number which indicates the number of devices you will be performing operations on.
2. To activate Tags please press 'Wake up' icon in the bottom.
3. You will see commands being sent to each of the selected tags.
4. If operation is successful then the number under "Configured devices" matches 'Selected devices count'
5. Important - depending on the pre-selected threshold your tags may start alerting immediately once activated. Please move them apart to a distance exceeding selected threshold.

Getting started - tag activation



Alert level
very close

Alert mode

☐ adv_mode

☐ vib_mode

☐ led_mode

Alert distance threshold: 1.00 m

Alert RSSI threshold: -40 dBm

SLEEP

WAKE UP

CONFIGURE



```
[efe846b22d96] Connecting ...  
[d860fe404354] Connecting ...  
[d860fe404354] Connected  
[d860fe404354] Sent: alert_settings:03=00  
[d860fe404354] Configuration Success. Disconnected  
[efe846b22d96] Connected  
[efe846b22d96] Sent: alert_settings:03=00  
[efe846b22d96] Sent: 0064 28  
[efe846b22d96] Configuration Success. Disconnected
```

Alert level
very close

Alert mode

☐ adv_mode

☐ vib_mode

☐ led_mode

Alert distance threshold: 1.00 m

Alert RSSI threshold: -40 dBm

SLEEP

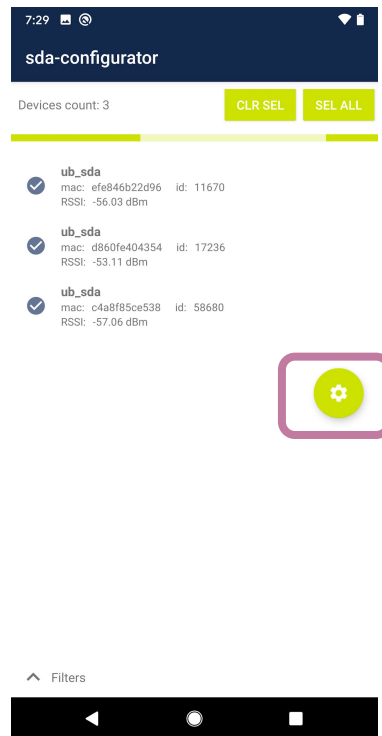
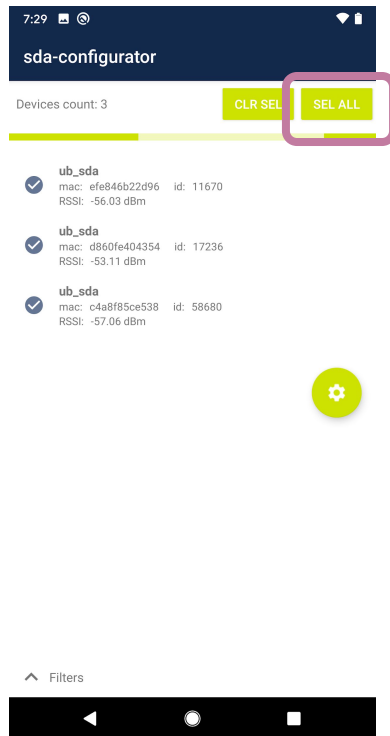
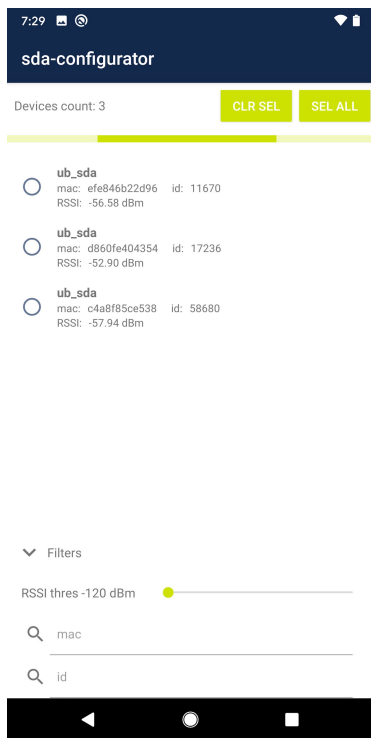
WAKE UP

CONFIGURE

Getting started - tag deactivation

1. To deactivate tags in order to save battery or perform maintenance or cleansing first select the tags you wish to deactivate by touching and holding its ID. Multiple selection is available. If you wish to deactivate all the tags currently on your in-app list you may use 'Select all (SEL ALL)' button.
2. When you select a Tag (Tags) a 'Settings' icon will appear
3. Once all the tags you wish to activate are selected, please touch the "Settings' icon
4. Now go to next page

Getting started - tag deactivation



Getting started - tag deactivation

1. On next screen you will see 'Selected devices count' number which indicates the number of devices you will be performing operations on.
1. To deactivate Tags please press 'Sleep' icon in the bottom.
2. You will see commands being sent to each of the selected tags.
3. After all commands are sent all tags have been deactivated
4. If operation is successful then the number under "Configured devices" matches 'Selected devices count'

Getting started - tag deactivation



Selected devices count: 2
Configured devices: 0

Devices failed: 0

Alert level
very close

Alert mode

☐ adv_mode

☐ vib_mode

☐ led_mode

Alert distance threshold: 1.00 m

Alert RSSI threshold: -40 dBm

SLEEP

WAKE UP

CONFIGURE



Selected devices count: 2
Configured devices: 2

Devices failed: 0

```
[efe846b22d96] Connecting ...  
[d860fe404354] Connecting ...  
[d860fe404354] Connected  
[d860fe404354] Sent: alert_settings:03=00  
[d860fe404354] Configuration Success. Disconnected  
[efe846b22d96] Connected  
[efe846b22d96] Sent: alert_settings:03=00  
[efe846b22d96] Sent: 0064 28  
[efe846b22d96] Configuration Success. Disconnected
```

Alert level
very close

Alert mode

☐ adv_mode

☐ vib_mode

☐ led_mode

Alert distance threshold: 1.00 m

Alert RSSI threshold: -40 dBm

SLEEP

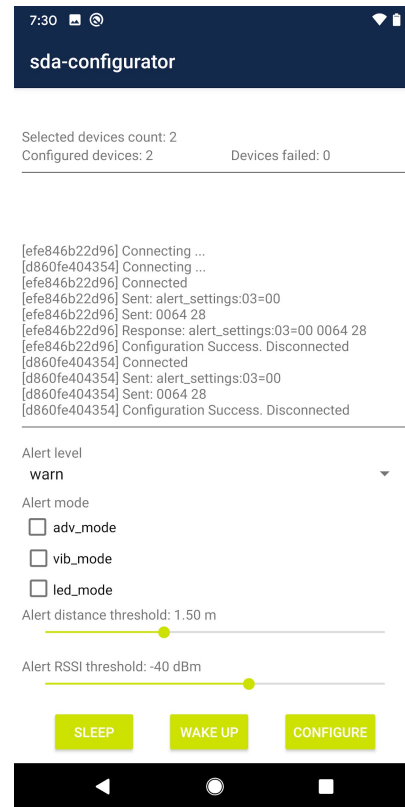
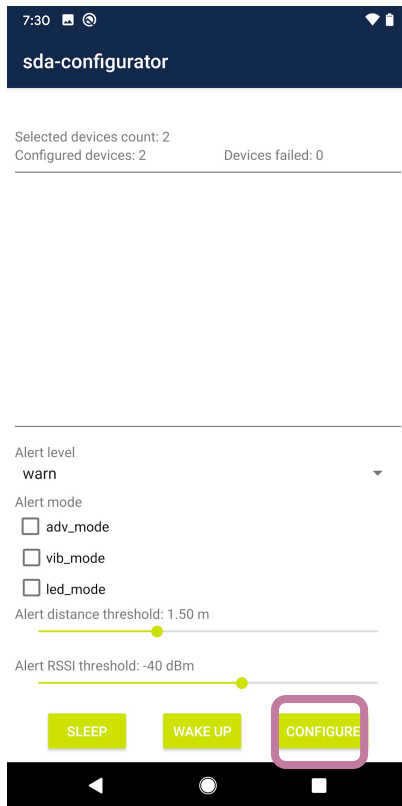
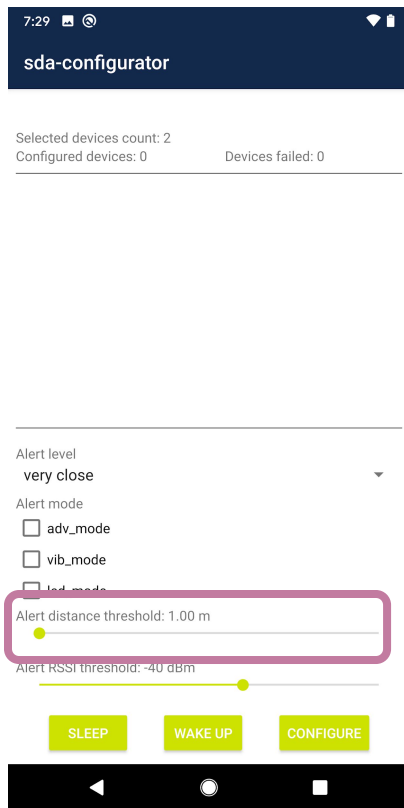
WAKE UP

CONFIGURE

Getting started - tag configuration - threshold

1. Threshold is a perimeter around each tag considered as a safe zone.
2. In order to set the threshold please select the tags you wish to configure from the in-app list.
3. Then press 'Configure' icon.
4. Then on next screen find 'Alert distance threshold'
5. Use the slider to select the distance expressed in meters you wish to be set as safe perimeter around each tag you are now configuring.
6. Once you select the perimeter please press 'Configure' button
7. Then after a series of commands your tags will be configured
8. If operation is successful then the number under "Configured devices" matches 'Selected devices count'

Getting started - tag configuration - threshold



Getting started - tag configuration - alert mode

1. There are 3 alert modes which can be used. You may configure 1, 2 or 3 for different proximity breach scenarios.
2. Adv_mode - is when the tags starts sending BLE advertisements, only used in case there is SDA server onsite.
Vib_mode - is when the tag vibrates on alert
Led_mode - is when the tag starts flashing with its red LED
3. To configure which alert(s) you wish to use, please first select tags you wish to configure, then press "Settings" icon.
4. Then please tick appropriate box next to the alert type you wish to use.
5. Then press 'Configure' button and after a series of commands your tags will be configured
6. If operation is successful then the number under "Configured devices" matches 'Selected devices count'

Getting started - tag configuration - alert mode



Selected devices count: 2
Configured devices: 0 Devices failed: 0

Alert level

very close

Alert mode

- ☐ adv_mode
- ☐ vib_mode
- ☐ led_mode

Alert distance threshold: 1.00 m

Alert RSSI threshold: -40 dBm

SLEEP

WAKE UP

CONFIGURE



Selected devices count: 2
Configured devices: 2 Devices failed: 0

Alert level

warn

Alert mode

- ☐ adv_mode
- ☒ vib_mode
- ☒ led_mode

Alert distance threshold: 1.50 m

Alert RSSI threshold: -40 dBm

SLEEP

WAKE UP

CONFIGURE



Selected devices count: 2
Configured devices: 2 Devices failed: 0

```
[efe846b22d96] Connecting ...  
[d860fe404354] Connecting ...  
[efe846b22d96] Connected  
[efe846b22d96] Sent: alert_settings:03=00  
[efe846b22d96] Sent: 0064 28  
[efe846b22d96] Response: alert_settings:03=00 0064 28  
[efe846b22d96] Configuration Success. Disconnected  
[d860fe404354] Connected  
[d860fe404354] Sent: alert_settings:03=00  
[d860fe404354] Sent: 0064 28  
[d860fe404354] Configuration Success. Disconnected
```

Alert level

warn

Alert mode

- ☐ adv_mode
- ☒ vib_mode
- ☒ led_mode

Alert distance threshold: 1.50 m

Alert RSSI threshold: -40 dBm

SLEEP

WAKE UP

CONFIGURE

Getting started - tag configuration - alert level

1. There are 3 alert levels which can be used for each of the alert modes.
2. Notice - will alert when other tags are nearby, no action need to be taken
Warn - will alert when tags are close, caution is advised
Very close - will alert when action must be taken to remove oneself into safe distance
3. To configure which alert level you wish to set, please first select tags you wish to configure, then press "Settings" icon.
4. Then please tick appropriate box next to the alert type you wish to configure, multiple selection is possible. Note that for now it is only possible to set the same alert level for alert mode.
5. Then select alert level for this (these) alert type(s) from the dropdown menu.
6. Then press 'Configure' button and after a series of commands your tags will be configured
7. If operation is successful then the number under "Configured devices" matches 'Selected devices count'

FCC Statement

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this 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.

RF Exposure Information

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.