

# **NOCCELA Social Distancing and Contact Tracing Solution Installation Guide**

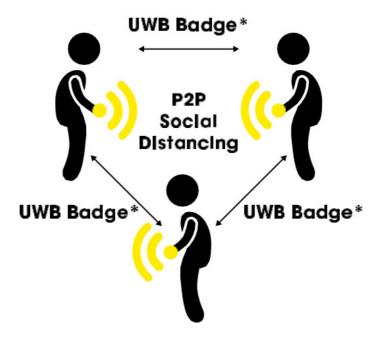
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#### **Social Distancing & Contact Tracing Solution**

Guide for Installation an n d Setup



**NOCCELA Ltd.** Keep critical operations running

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#### Introduction

This document explains step by step procedure for installation of UWB Badge's for Peer-to-Peer (P2P) alerts a n d contact tracing.

# **Setup Equipment**

S.No.	Item Description	Quantity
For P2P		
1	UWB Badges	х
Other (required for OTA u p g r a de or cloud offload) – Shipped Already		
2	UWB Beacon (PoE only)	01
3	5-Port PoE Switch	02
4	CAT6 Ethernet C a b I e ( Length – 2Meter)	03
5	Threaded Rod/ mounting bracket	01-set

**Table 1:** Social Distancing & Contact Tracing solution Equipment.

# **Noccela Social Distancing and Contact Tracing**

#### **Badge operating principle**

- Turn on: Device will turn on when pressing the button for one second. (beep)
- When the device is ON, the LED indicates idle with blinking blue.
- Turn off: Device will turn off when pressing the button for four seconds. (bzz bzz)
- Silence: When alerting, the tag can be silenced for 10 minutes by pressing the button for one second.

- Power: The device has a 750 mAh battery. Battery life is approx. 10 days. The device is recommended to turn
  off after the workday.
- Battery LED-indicator:
  - Battery state is indicated with LED light:
  - > 40% BLUE
  - 10%-40% YELLOW
  - < 10% RED
- Battery charging time 2h. The device will be charged with a USB-C cable.
- · During charging, LED is RED. When the battery is full, LED is GREEN
- The device communicates with beacons for data offload and firmware updates.

#### Safe distances



Badges are measuring the distances between each other. If the distance mittaavat etäisyyttä toisiinsa. If the specified distance is exceeded, the device will trigger an alert sound and LED light.

#### Alert occurs if:

- The distance between the devices is less than 1.5 meters:
  - RED LED indication
  - Frequent beeping (every second)

The above settings are customizable by the customer.

Note: The power-saving feature is enabled in the latest software. The device goes to sleep if the device is stationary for 60 seconds. The device is activated again when the device detects movement (acceleration sensor). This is also customizable by the customer.

# Beacon (for Over-the-Air updates and Cloud Offload)

Beacon s are NOT required for basic P2P proximity detection and alert. One Beacon can be installed away from the working area for:

- Badge data up load to cloud (including contact history)
- Over-the-Air firmware upgra de of Badges.

Beacon installation can be ignored if OTA and/or Cloud offload is not required.

#### **Beacon Installation Steps**

1. Beacon s are PoE powered, so a simple CAT6 Ethernet cable can be used for Data and Power connectivity with the Beacon



figure 2: Beacon with CAT6 Cable PoE Port

2. One end of the CAT6 cable will be terminated on Beacon, and the other end of the cable will be connected to PoE Switch.

Ports TCP 443 and UDP 1317 have to be open.



#### Figure 3: PoE Port of Switch, connected with Beacon

3. PoE switch in Power supply.



Figure 4: Power Switch

- 4. Ethernet Cable to be connected from Port 5 on PoE Switch to Customer's Network.
- 5. Once connections are made, turn on the power supply of the PoE switch. Blue LED on Beacon will light up.
- 6. Bringing Badge close to Beacon will allow Badge to transfer data to Cloud.
- 7. A laptop can be used to check if internet browsing is working on Switch.

#### **OTA Upgrade Steps**

For upgrading the Firmware of the Badges, follow the steps below:

- 1. Set up and power on the Beacon as per the steps defined in section 5.1
- 2. Bring the Badge (s) close to where the Beacon is placed.
- 3. Once the Badge (s) is in the range of the Beacon, the latest firmware will be automatically uploaded into them.

#### **Cloud Offload and Contact**

### **Tracing Steps**

For offloading contact data from Badges internal memory, follow the steps below:

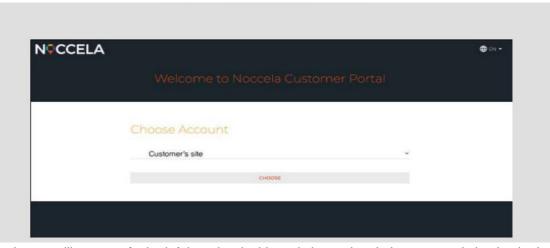
- 1. Once the Badges are updated to the latest firmware ( as per steps defined in section 5.2), bringing them close to the Beacon again will automatically upload the contact data to The process is completely automated and contact tracing is available in the latest firmware. Once the data has been uploaded, contact tracing can be accessed via the web application.
- 2. Login to https://my.noccela.com/ and use the following credentials: Username: Customer's email.

Password: Delivered by Noccela



Figure 5: Web UI - Login

3. Once logged in, the "Choose Account" page will pop up.



4. A dashboard page will appear. At the left bar, the dashboard shows the site's name and checks the box for show beacons. Beacon is green to indicate that system is online.

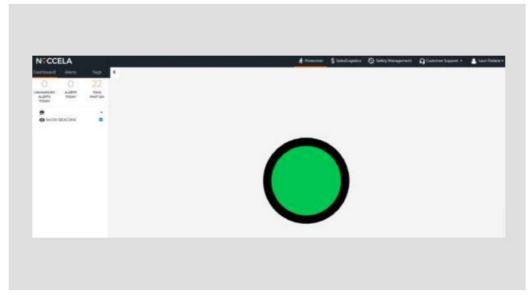


Figure 7: Web UI—Landing page

6. Click on the "Safety Management" tab. The left bar gives options Site Statistics, User Statistics, Configure

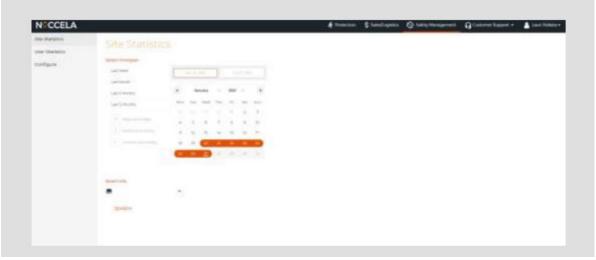


Figure 8: Web UI — Navigating in Contact Tracing page

7. Site statistics give useful information regarding contacts in selected timespan at your site.



Figure 9: Web UI —Site statistics

8. User statistics give you important data for contact tracing. Select timespan and search. You can filter tags and sort by with several options.

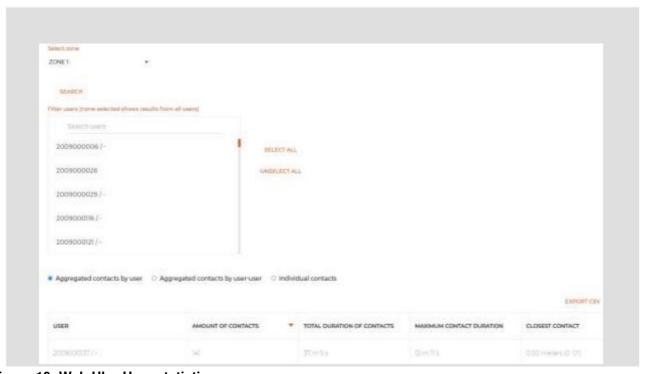
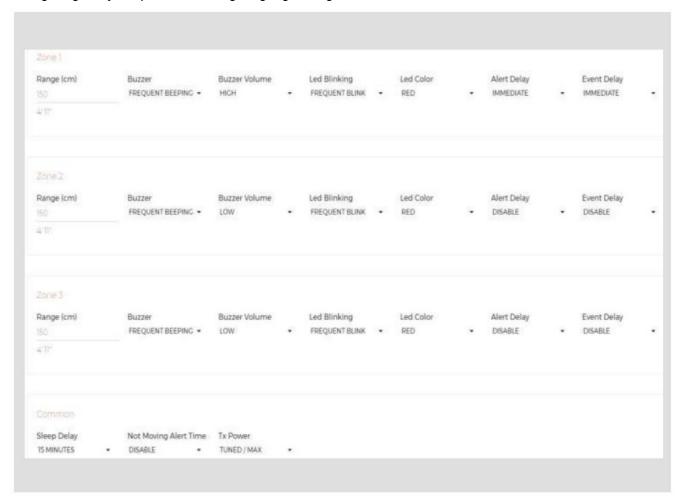


Figure 10: Web UI— User statistics

9. Configure gives you options for configuring tag settings.



# Safe use of UWB Badge

Extra caution should be followed when wearing a Badge near objects that the device could be stuck to. A lanyard with a safety breaker feature should be used only to avoid excess force to occur against the person.

To prevent possible damage, excess force against the Badge enclosure should be avoided. Wearing products for example in the back pocket of trousers is prohibited.

In case of broken enclosure use of the product should be discontinued and Noccela Customer Support should be contacted for further advice.



Figure 12: UWB Badge — lanyard with safety breaker feature

# Compliance

This product complies with Directives 2014/53/EU, 2014/30/EU, 2014/35/EU, and 2011/65/EU.

FCC-I D:2AVRO-BADGE-3

#### **FCC** regulatory information

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.

#### **FCC Radiation Exposure Statement:**

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

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

The installation of the Noccela system is allowed only by authorized personnel. Any electrical or technical modification of the device is prohibited.

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#### **Documents / Resources**



**NOCCELA Social Distancing and Contact Tracing Solution** [pdf] Installation Guide BADGE-3, BADGE3, 2AVRO-BADGE-3, 2AVROBADGE3, Social Distancing and Contact Tracing Solution, Contact Tracing Solution, Tracing Solution

# References

- • sales@noccela.com
- Noccela Customer

Manuals+,