

# **SLX Heartbeat**

AED Status Monitoring Kit for ZOLL AED Plus®



# **Installation Guide**

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# **Purpose of this Document**

This is the installation guide for SLX Heartbeat. The purpose of this document is to guide an electrician through the process of installing the SLX Heartbeat AED Status Monitoring Kit.

## Introduction

The steps, preconditions and requirements described in this document need to be fulfilled in order for the SLX Heartbeat to be installed.

### **Preconditions**

- AED model Zoll AED Plus
- AED cabinet, model CAH55100M or Cabix Outdoor
- Access to a 4G/3G network w/ sufficient signal strength
- SLX Heartbeat Installer App (for Android or iOS)





## **Unboxing SLX Hearbeat**

#### **SLX Heartbeat Main Unit**

Communication unit with magnetic backplate.

Main Unit is used for:

- 1. Collection of sensor data
- 2. Sending of data to the cloud via 4G/3G/2G modem

The Main Unit contains several sensors measuring sound, temperature and humidity.

NB: The QR code sticker (the monitoring unit's unique ID) is now on the Main Unit casing itself, and not on the backplate as shown in the pictures.



#### **SLX Heartbeat Main Unit - backplate**

4x magnets + 4x screws are included.

The backplate is affixed to the Main Unit using the 4 screws. The 4 magnets (washers) ensure that the backplate can be mounted correctly in the AED cabinet.

NB: The QR code sticker (the monitoring unit's unique ID) is now on the Main Unit casing itself, and not on the backplate as shown in the pictures.



#### **SLX Heartbeat Eye**

Sensor Eye and Eye Socket for Zoll AED Plus

The Sensor Eye is used to connect the Main Unit to the AED. It has built in sensors for measuring temperature and color.

The Eye Socket makes it possible to attach the eye to the AED.



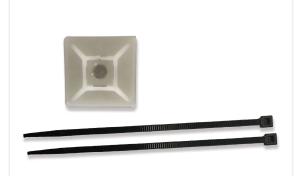


#### **SLX Heartbeat Cable-Tie Mount**

Cable-Tie Mount for installation

2x strips are included.

The included cable-tie mount and 2 strips are used for neat installation of the Sensor Eye.



#### **SLX Heartbeat Plate**

Metal plate with double-sided tape

The plate is necessary in cabinets that don't have magnetic sides. In this case, the plate is affixed to the cabinet before the Main unit, which then attaches magnetically to this plate.



### **SLX Heartbeat Battery**

Battery for the Main Unit



With all of these components accounted for, you are now ready to begin installation of SLX Heartbeat.



## Installation

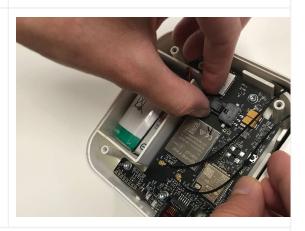
- Check mobile coverage before installing the cabinet, cf. guidance document from Telenor
  - a. Place the cabinet up against the wall on the ground just below the desired mounting location
  - b. On an Android phone / tablet, open the "Network Cell Info" app (find link in Telenor documentation)
  - c. Place the mobile in the cabinet and close the door.
  - d. Confirm that signal levels are sufficient and that a connection is made to an "LTE" network, cf. Telenor documentation



**Important:** Contact the provider if there is weak / no coverage before continuing the installation.

2. Install battery in Main Unit

The 3 LEDs blink three times when the battery is installed. After that, the Main Unit is automatically set to "service mode".



#### Good to know:

5 minutes after the battery has been installed, the Main Unit automatically wakes from "service mode" and starts the onboarding process. If the Main Unit is not installed in the AED cabinet, it sends an error message to the Seluxit Cloud<sup>1</sup>.

There is no cause for alarm in this case, as the Main Unit is reset during the onboarding process which you will perform later, when the Main Unit is installed in the AED cabinet.

<sup>&</sup>lt;sup>1</sup> Collective term for Viasens by Seluxit and Wappsto by Seluxit



 Use the screws (including magnets) to fasten the backplate to the Main Unit. Magnets will thereby be placed on all four corners.

NB: The QR code sticker (the monitoring unit's unique ID) is now on the Main Unit casing itself, and not on the backplate as shown in the pictures.

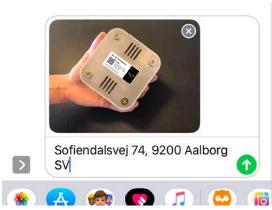


4. Take a picture of the unique ID on the Main Unit. It is located on the back of the Main Unit.

NB: The QR code sticker (the monitoring unit's unique ID) is now on the Main Unit casing itself, and not on the backplate as shown in the pictures.

The picture of the unique ID on the Main Unit should be sent together with the installation address to the service company monitoring the AEDs after the installation has been completed. Alternative or additional steps may be required depending on the service company.

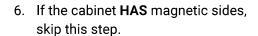






 Open the cabinet and place the cable-tie mount on the right side of the cabinet, centered and about 12 cm from the top.

NB: When the cabinet is opened you'll hear a high-pitched alarm for about 30 seconds. You can stop the alarm by using a magnet placed on the door contact. You need to bring your own magnet for that purpose.



If the cabinet **DOES NOT HAVE** magnetic sides, mount the SLX Heartbeat Plate on the left-hand side of the cabinet.

NB: To ensure the best possible signal, the SLX Heartbeat Plate should be mounted on the left-hand side of the cabinet. The lower-left corner should be about 2 cm from the door and 4 cm up from the bottom of the cabinet.

7. Connect the Sensor Eye in the Main Unit.









8. Use the magnets on the back side of the Main Unit to attach it to the inside of the AED cabinet.

NB: To ensure the best possible signal, the SLX Heartbeat Plate should be mounted on the left-hand side of the cabinet. The lower-left corner should be about 2 cm from the door and 4 cm up from the bottom of the cabinet.

Make sure that the Main Unit is installed so the cable jack for the Sensor Eye points downwards.

 Attach the Sensor Eye cable to the cable-tie mount using the included strips. Ensure that there are 12-14 cm of cable from the Sensor Eye to the cable-tie mount.





10. Place the Eye Socket on the AED using the double-sided tape, already affixed to the Eye Socket.

NB: For optimal hold, clean the surface (for example with alcohol) before the Eye Socket is affixed to the AED. Be careful when you attach. The glue is strong, so you have only one chance to properly mount the Eye Socket.





11. Place the AED in the cabinet.



12. Click the Sensor Eye to the Eye Socket.



The installation is now finished, and you are ready to continue on to the onboarding process.



# **Onboarding**

1. Press and hold the button in on the Main Unit. The 3 LEDs will begin to blink in a certain order as you press the button. When the LEDs stop this blinking pattern, you can release the button.

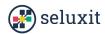


2. All 3 LEDs will now blink synchronously to show that the Main Unit is in "service mode".



3. Press and release the button once to start the test phase.

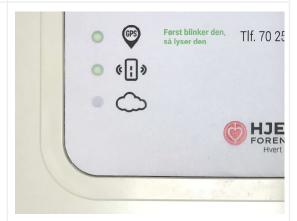




4. The system will now test that the Sensor Eye works as expected. The Sensor-Eye LED will blink for about 10 seconds. After that, this LED will light up constantly, indicating that the test was successful.



The system will now find the GPS
position of the Main Unit. The GPS
LED blinks for about 40 seconds.
After that, this LED will light up
constantly, indicating that the GPS
location was found.



6. The last step is to establish a connection to the Seluxit cloud. The cloud LED will blink until the Main Unit is connected. After that, this LED will light up constantly, indicating that the test was successful.





7. When all 3 LEDs light up constantly for 10 seconds, the onboarding has been successful.

The 3 LEDs continues to light up for 15 min after successful installation.

If one or more of the LEDs continues to blink, the onboarding process has failed.

Please refer to the troubleshooting section for additional help.



8. The Main Unit now switches off all LEDs and goes into sleep mode.



The onboarding process is now finished, and SLX Heartbeat is running. If you experience problems, you should read the troubleshooting section below. In this section, you can get input to how you can find and solve common problems.



## **Troubleshooting**

- Problem: I didn't finish the installation or the onboarding process was started before I finished the installation.
  - Action:
    - Finish the installation and then restart the onboarding process from the first step
- Problem: The status indicator on the AED has a red cross, meaning that the AED is not functioning correctly.
  - Action:
    - Report the problem to the service company monitoring the AEDs
- Problem: No LEDs blink during the onboarding process.
  - Action:
    - Remove battery.
    - Put the battery back in.
      - Start the onboarding process from the first step.
    - If that doesn't work, replace the battery with a new battery.
      - Start the onboarding process again.
- Problem: The Sensor Eye LED (1) doesn't stop blinking.
  - Action:
    - Make sure that the Sensor Eye is placed correctly. Adjust and start the onboarding process again from the first step.
    - Change the Sensor Eye with a new Sensor Eye, and start the onboarding process again from the first step.
- Problem: GPS LED 

  doesn't stop blinking.
  - Investigate:
    - Place a mobile telephone in the AED cabinet, close the door and try to ring to the phone. If you can do so, the mobile signal is okay.
  - Action:
    - If the mobile signal is okay  $\rightarrow$  start the onboarding sequence again from the first step.
    - If the mobile signal isn't okay  $\rightarrow$  call the service company monitoring the AEDs to report the problem.
- Problem: Cloud LED 🗅 doesn't stop blinking.
  - Investigate:
    - Does the GPS LED light up?
  - Action:



- If the GPS LED lights up→ start the onboarding sequence again from the first step.
- If the GPS LED doesn't light up, this can be a sign that the mobile signal is not strong enough or is unstable.
  - Place a mobile telephone in the AED cabinet, close the door and try to ring to the phone. If you can do so, the mobile signal is okay.
  - If the mobile signal isn't okay → call the service company monitoring the AEDs to report the problem.