

Start-up STR-200



Version: 1.0

12.07.2021



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1. Introduction

In this documentation you will learn how to commission your product and evaluate the data.

At SLOC, we always strive to make our products as simple and intuitive as possible. However, should you encounter any problems, we are happy to assist you.

E-Mail Adresse: support@sloc.one

1.1. Steps of commissioning

The following steps must be completed for successful configuration of the SLOC Device:

1. visit support.sloc.one
2. download of the commissioning documentation
3. login/registration on SDM portal (chapter 2.1)
4. SDM app installation on Android device (chapter 2.2)
5. wake up of the SLOC with the magnet (chapter 3)
6. configuration of the SLOC with the SDM app (chapter 4)
7. check data transmission (chapter 5)
8. mounting the SLOC on the vehicle (chapter 6)
9. data analysis via CSV, REST API or Power BI (chapter 7)

1.2. Helpful documents

[Download SLOC Software-Manual](#)



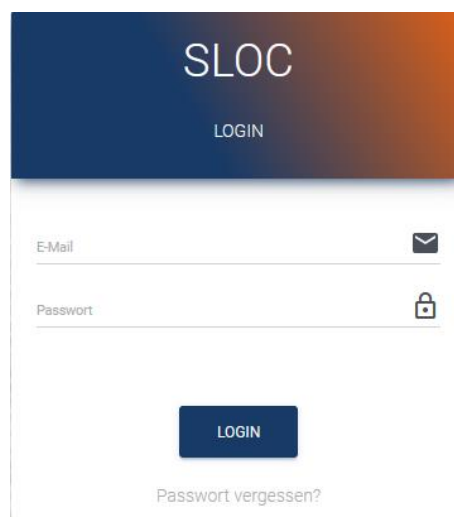
2. SLOC Device Management (SDM)

SLOC Device Management consists of a web portal (<https://sdm.sloc.one/>) and an Android app, which is required for configuration.

2.1. First login to the SDM-Portal

If you purchase your products through SLOC, you have been sent a registration email that allows you to register on the SDM portal and set a password.

If you purchase the product through an external platform, please use the e-mail address with which the order was placed. You will find the password in the product packaging on the enclosed information sheet. You will then receive a registration link and can assign your password.



(Login Screen)



(SDM-Portal)



2.2. App Download & Installation

The app can be downloaded to a smartphone/tablet via the SLOC Support-Center (<https://support.sloc.one>) by clicking on your product (STR-200) and then downloading the AP K-file. This can be done directly from the smartphone/tablet or via a PC and USB cable. The app can then be installed.

For more information on APK installation, please refer to chapter 3 of the SLOC Software Manual at support.sloc.one.

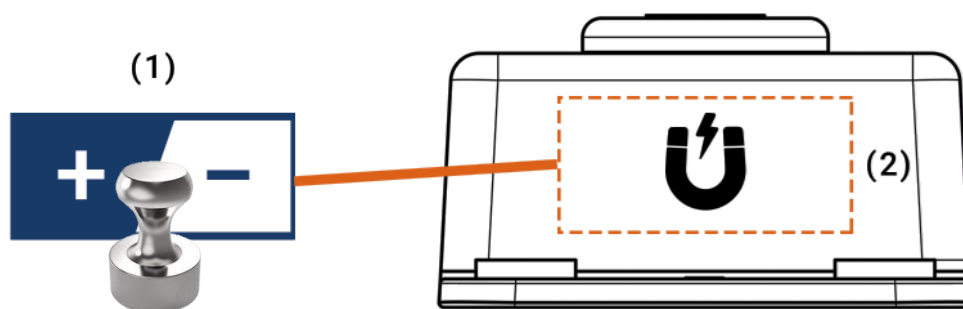


3. Activate/deactivate SLOC

3.1. activate

To be able to configure an SLOC, the transport mode of the SLOC must first be deactivated and/or the BLE visibility must be activated.

To do this, the magnet (included in the scope of delivery) must be placed for at least 2s on the side of the SLOC and moved back and forth, if necessary, on which the magnet symbol is shown (see illustration).



3.2. Disable BLE Visibility

The BLE communication is automatically deactivated after 60 seconds. After that, it can be reactivated with the magnet (see chapter 3.1).

3.3. Transport mode

The transport mode is the mode in which the SLOC is sent (i.e., the SLOC does not measure and send any data and consumes almost no energy).

To set an activated SLOC back to transport mode, the SLOC must be selected in the SDM app and the button "Transport mode on" has to be clicked under "ADVANCE"



4. SLOC Configuration

On the following pages the configuration is explained step by step with pictures.

IMPORTANT:

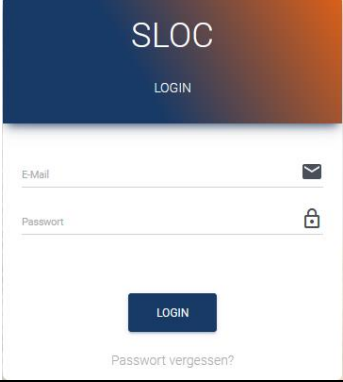
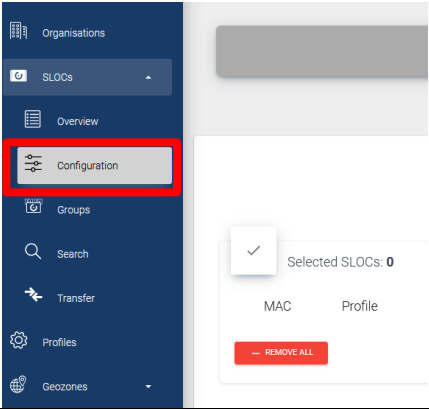
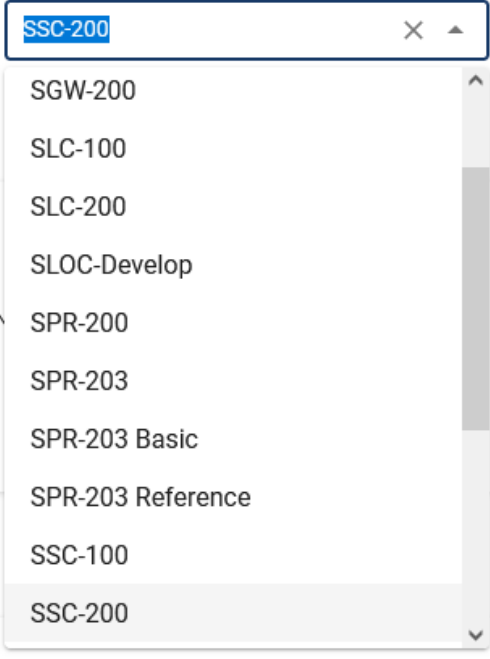
It is essential to configure the SLOC and check the data transmission before installation.

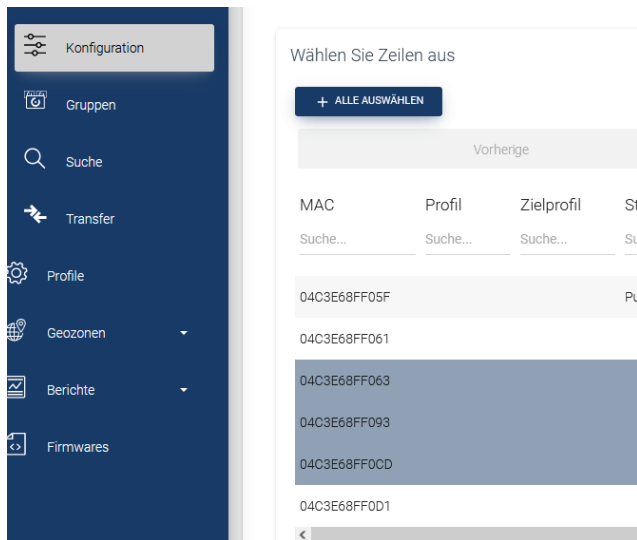
NOTE:

The SLOC's BLE will be disabled after 60 seconds. If during the use of the app, a SLOC is no longer accessible, wake it up again with the magnet (see chapter 3.1.).



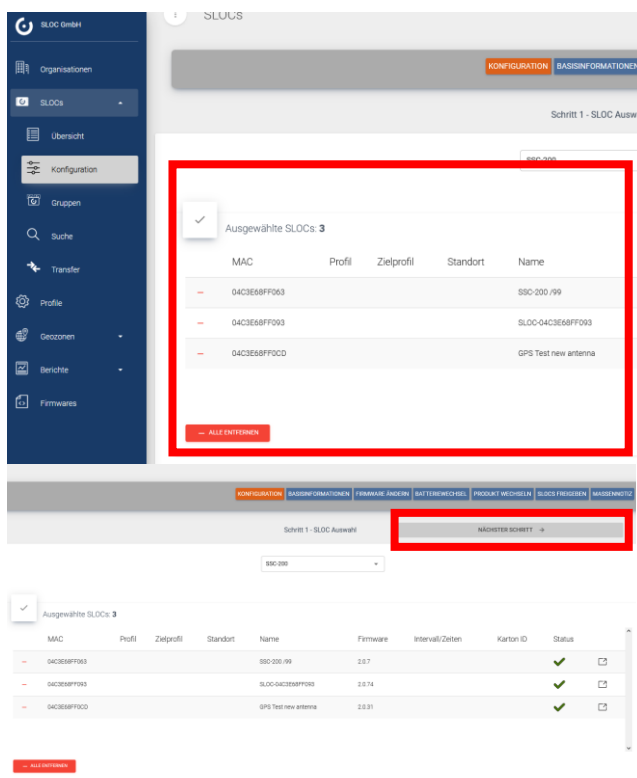
4.1. Configuration mit SDM-Portal (SOTA)

	1. Configuration with SDM-Portal: Open the website https://sdm.sloc.one Login with e-mail and password → Click on LOGIN
	2. Open the SLOC Configuration: → Click on „SLOC Configuration“
	3. Select product: → Click on „STR-200 “



3.1 Select SLOCs:

→ Click on the „MAC Adress“



3.2 Control:

→ Check again the MAC IDs at the top of the page

→ Click on „Next Step“

Step 2 - Configuration

CHECK SETTINGS

[1] Interval ☒ Times ☐

Interval s

[2]

	Hours	Minutes
Time 1		
Time 2		
Time 3		
Time 4		

Movement duration (in minutes)

Standstill duration (in minutes)

Store movement data

Summary

Times	11:00
SLOCs	04C3E68FF000

SAVE

4. Set up:

→ Interval (in seconds): [1]

- SLOC transmits after the interval has elapsed.

→ Time-Based Transmission: [2]

Enter up to 4 times (hh:mm) at which the SLOC transmit the data

→ Movement Duration: [3]

- Define a motion duration by which a recording should take place.
- Set the button „save movement data“ to activated.

→ Click on „Check Settings “

→ Click on „Next Step“ (top of the page)

4.1 Save the setup:

→ Summary will be shown

→ Click on „Save“

Interval/Times Box ID Status

Search...

09:45, 14:00



86400s



5. Setup update

With the next data transmission of the SLOC the setup is synchronized



Settings have not been applied.

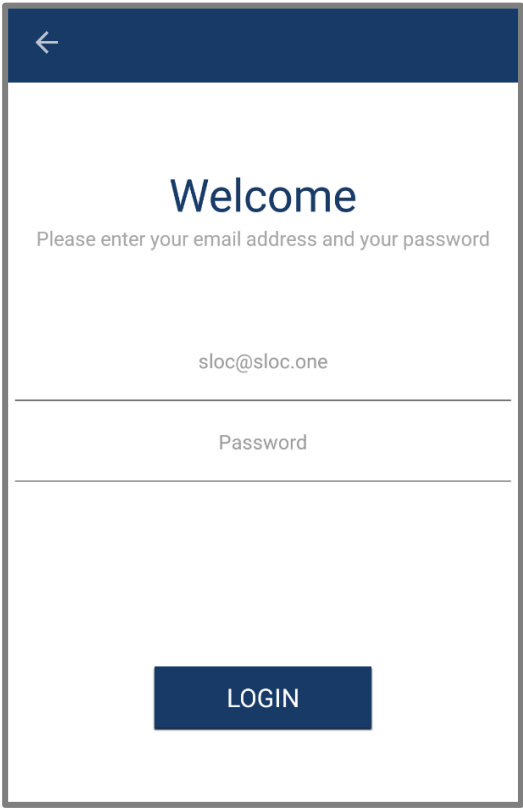


Settings have been applied successfully.

CONFIGURATION COMPLETED

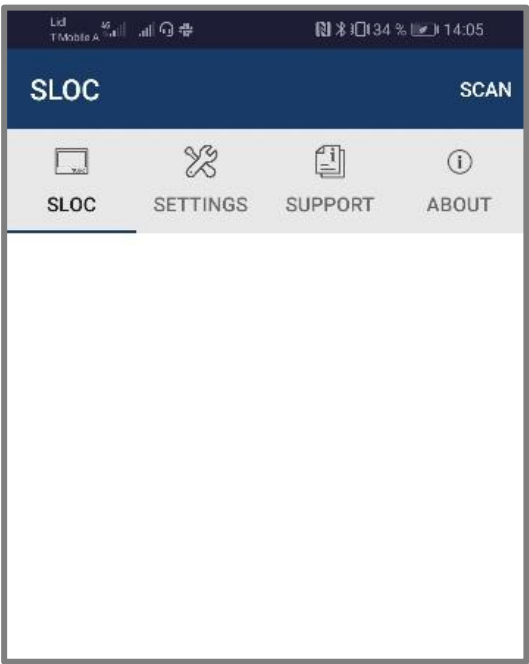


4.2. Configuration with SDM-App (BLE)



LOGIN SDM-APP:

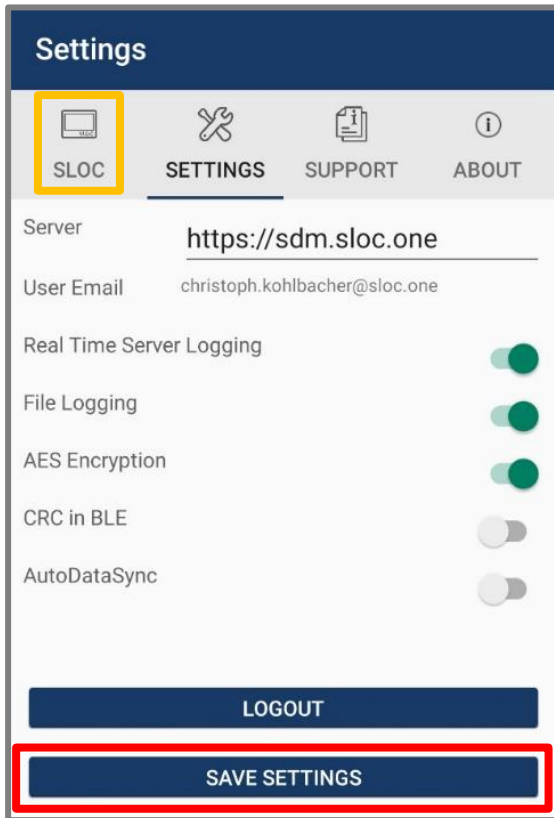
Use SLOC Device Management login data (see Chapter 1).



HOME:

After logging in, the "SLOC" tab is automatically displayed





1. SETTINGS:

Check the settings:

- Server must be *https://sdm.sloc.one* sein
- Other settings asin the picture on the left.
- API Key, Organization UUID, Organization and privileges vary depending on used APP-Token.

→ **Click on „Save Settings “**
(Only if changes were made)

→ **Switch to SLOC Tab**

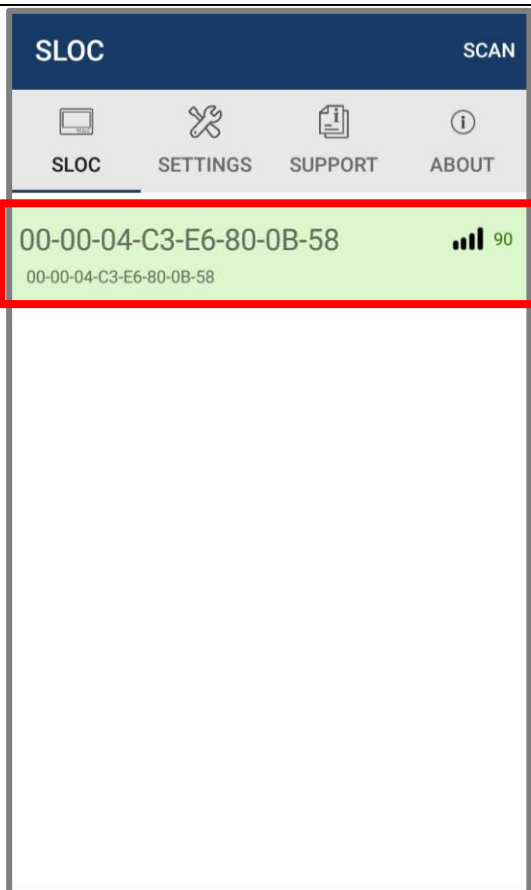


2. SCAN for SLOCs:

“Wake up” SLOC (see chapter 3)

After that → **Click on SCAN**





3. SLOC Selection:

→ Click on desired SLOCs

→ based on the MAC-Adress
(see label on SLOC)

Tipp:

The BLE of the SLOC will be deactivated after 60 seconds.
If the app cannot establish a connection, the SLOC must be reactivated with the magnet.



4. Establish connection:

The APP connects to the selected SLOC

Connection successful:

→ Font turns green [1]
→ SLOC start page opens.

Connection not successful:

→ Font remains gray [2]
→ Click on „BACK “
→ Select SLOC again



← Konfiguration

SETUP DATEN & EVENTS ERWEITERT

Gerät

SLOC Name : STR-200 Test

MAC Adresse 04-C3-E6-80-16-99

Sim ID 89882280000001591094

Firmware Version 2.0.1 >

SLOC Info

Produkt STR-200

5. SLOC:

Now you are in the overview mask of the SLOC configuration.

→ Click on **SETUP**

Note:

If the SLOC has never been configured before, step 5 (setup page 1/2) is displayed directly.

← Configuration

SLOC Setup

MAC: 00-00-04-C3-E6-80-15-87

Common

Product STR-200

Profile Tap to select Profile

Name New SLOC

Location B67c 1a, 8010 Graz, Österreich

SAVE

6. SETUP 1/2:

Product:

STR-200 (cannot be changed)

Name:

Can be changed as desired

Location:

Optionally a location can be entered.

→ Click next to location

← SLOC Setup - Location

CURRENT LOCATION VIA GPS

Location

Street Waltendorfer Gürtel 2

Zip Code 8010

City Graz

Country Österreich

GPS

FROM LOCATION INFORMATION

Latitude 47.06277

Longitude 15.45710

SAVE CANCEL

Note: Steps 7 & 8 are only displayed when clicked next to LOCATION and can be skipped if no location is desired.

7. Location

Variant 1: (directly at the location)

→ Switch on GPS

→ Click on „Current Location via GPS “

→ Wait until GPS location is determined.

→ If the address is not correct, it can be changed manually.

Variant 2: (in preparation)

→ Enter Address

→ exactly according to the following scheme:
address, house number, postal code, city,
country

→ Click on „FROM LOCATION INFORMATION“

→ wait until GPS coordinates are loaded.

→ Click on **SAVE**

← Configuration

SLOC Setup

MAC: 00-00-04-C3-E6-80-15-87

Common

Product STR-200

Profile Tap to select Profile

Name New SLOC

Location B67c 1a, 8010 Graz, Österreich

SAVE

8. SETUP 1/3:

The basic parameters were recorded.

→ Click on **SAVE**



← Configuration

SLOC Setup 2/2

00-00-04-C3-E6-80-15-87

Parameter Configuration

Transmission interval

☐ [1] Intervall 86400 in seconds

☒ [2] Times 1 - 2 12:00

Times 3 - 4

Connectivity

☐ Server IP 18.197.45.131

RELOAD CONFIRM

9. SETUP 2/3:

Transmission:

Select transmission variant

→ Interval (in seconds): [1]

- SLOC transmits after the interval has elapsed.

→ Time based transmission: [2]

- Enter up to 4 times (hh:mm) at which the SLOC should transmit the data.

→ Click on „CONFIRM “

Notice:

Not both variants can be selected.

← Configuration

SLOC Setup 3/3

00-00-04-C3-E6-80-15-87

Parameter Configuration

[1]
Bewegung Start 1 Minuten ?

[2]
Bewegung Stop 5 Minuten ?

[3]
Bewegungsdaten ☒

RELOAD CONFIRM

9. SETUP 3/3:

Recording of the motion data:

→ Select start after X minutes [1]

- A movement of X-minutes must be given so that the movement is recognized as such.

→ Stop after X minutes [2]

- A movement must be interrupted (at a standstill) for X minutes for data transmission and radio cell localization to begin.

→ Activate „Movement Data“ [3]

→ Click on „CONFIRM “

←

Configuration

SETUP

DATA & EVENTS

ADVANCED

Device

SLOC Name

D2GO

Mac Address

04-C3-E6-80-15-87

Firmware Version

1.5.47U >

SLOC Info

Product

STR-200

Profile

10. CONFIGURATION COMPLETED

Before mounting (see chapter 6), the data transmission should be checked (see chapter 5).

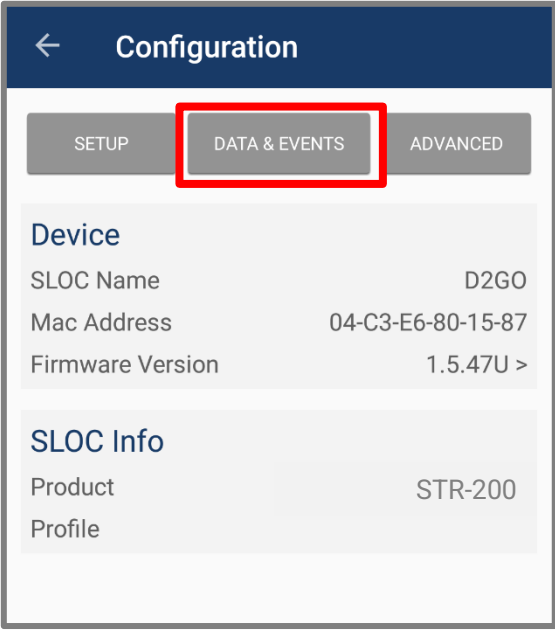
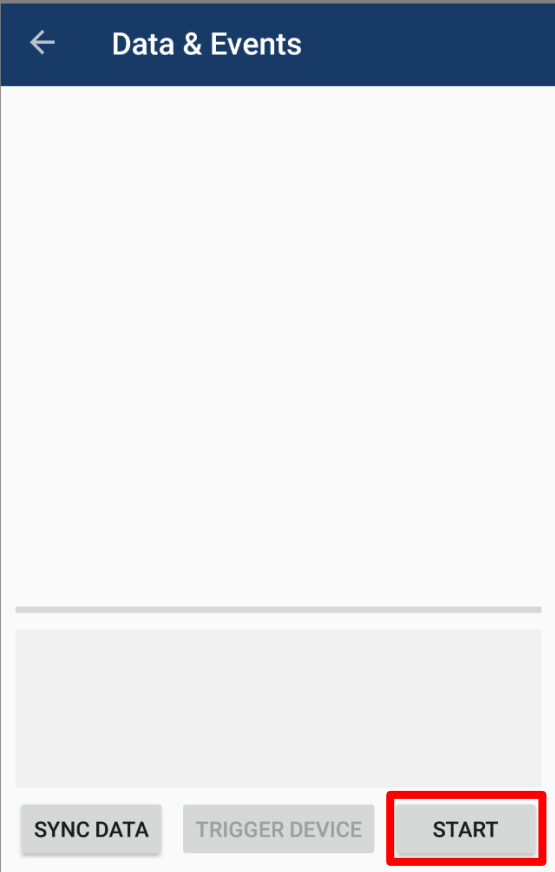


5. Check data transmission

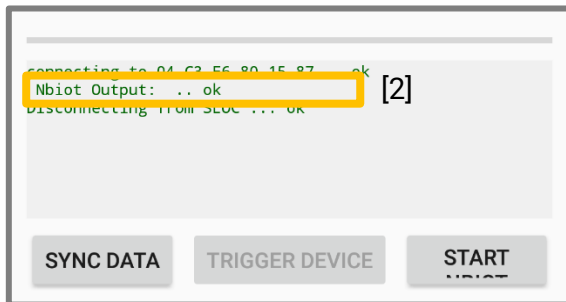
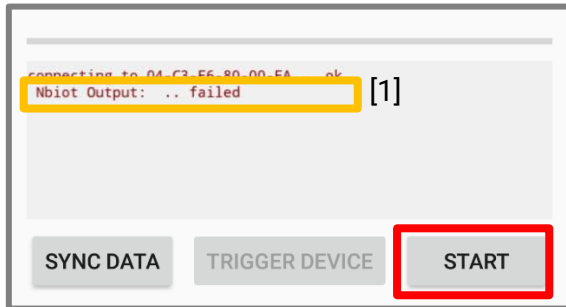
5.1. Start data transmission with NB-IoT (APP)

Note:

To start the data transmission the SLOC must have a setup see (chapter 4).

	<u>1. DATA & EVENTS 1/3:</u> → Click on DATA & EVENTS
	<u>2. DATA & EVENTS 2/3:</u> → Click auf START (Triggers a measurement and NB-IoT data transmission)





3. DATA & EVENTS 3/3:

NB-IoT Output = „failed“ [1]:

→ Click **START** again

NB-IoT Output = „ok“ [2]:

→ the NB-IoT transmission was started

It is recommended to check after a few minutes in the SDM portal (see chapter 5.2).

Note NB-IoT transmissions can take up to 20 minutes.

5.2. Check data transmission in the SDM-Portal

To check if the SLOC has transmitted its data with NB-IoT, the following steps must be applied:

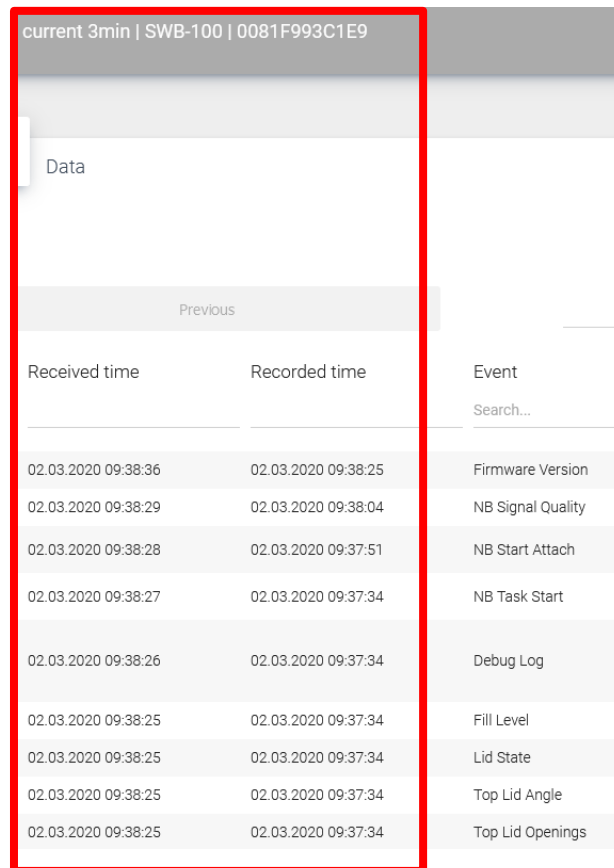
- Click on SLOCs [1]
- Search SLOC [2]
- Select SLOC [3]

ID	Product	Profile	Location	Name	Firmware	Target Firmware	Status
0081F993S366	SSC-100			geb test 2			
0081F993AB53	SSC-100			Alec-temp-test			
0081F993AC4C	SWB-100	240L Europlast	Waldendorfer Glutal 3, 8010 Graz	Stapler Test			
0081F993B03E	SWB-100	240L Europlast		attach 20min			
0081F993B09E	SWB-100	240L Europlast		B8-SEND-PROD			
0081F993B9B9	SSC-100			Temp Tes Geha			
0081F993BF9F	SWB-100	240L Europlast		A1 LWM2M			
0081F993BFA4	SWB-100	240L Europlast		rain test 2			
0081F993C1A5	SWB-100	240L Europlast		Rain test			
0081F993C1E9	SWB-100	3000L Waizinger		test current 3min	1.4.37		
0081F993C1EA	SWB-100	1100L Werkstaettenabfaelle		profileidtest			

- Click on Data [4]

General Information	
Name	A1 LWM2M
Organisation	SLOC GmbH
Product	SWB-100
Profile	240L Europlast

Detail Information	
Setup Date	06.03.2019 08:49:52
Production Date	06.03.2019 08:49:52
Batch	No data available
Sim ID	No data available

→ Check data transmission [5]

The screenshot shows a web interface with a header bar containing the text "current 3min | SWB-100 | 0081F993C1E9". Below the header is a tab labeled "Data". A "Previous" button is visible. The main content is a table with three columns: "Received time", "Recorded time", and "Event". A search bar is located under the "Event" column. The table contains ten rows of data, all with a "Received time" of "02.03.2020 09:38:25". The "Recorded time" and "Event" columns vary across the rows. A red rectangle highlights the "Received time" column.

Received time	Recorded time	Event
02.03.2020 09:38:36	02.03.2020 09:38:25	Firmware Version
02.03.2020 09:38:29	02.03.2020 09:38:04	NB Signal Quality
02.03.2020 09:38:28	02.03.2020 09:37:51	NB Start Attach
02.03.2020 09:38:27	02.03.2020 09:37:34	NB Task Start
02.03.2020 09:38:26	02.03.2020 09:37:34	Debug Log
02.03.2020 09:38:25	02.03.2020 09:37:34	Fill Level
02.03.2020 09:38:25	02.03.2020 09:37:34	Lid State
02.03.2020 09:38:25	02.03.2020 09:37:34	Top Lid Angle
02.03.2020 09:38:25	02.03.2020 09:37:34	Top Lid Openings

The reception time (**red frame**) can be used to check whether the SLOC has transmitted its data to the SDM portal via NB-IoT after clicking START (see section 5.1. point 2). If no data has arrived in the SDM portal after a waiting time of 20 minutes, there may be no NB-IoT reception.

6. Mounting

For information on mounting, contact our SLOC support team: support@sloc.one

7. Data evaluation

A CSV export, a REST API interface and the SLOC Waste Collection Portal (SWC) are available to evaluate the SLOC data.

7.1. CSV Export

See software manual chapter 2.10.2.

[Download SLOC Software-Manual](#)

7.2. REST-API interface

[Download SLOC interface documentaiton](#)

7.3. SLOC Waste Collection

Available soon



8. Legal Requirements

8.1. Declaration of conformity

Any changes or modifications not expressly approved by SLOC could void the user's authority to operate this equipment. No serviceable parts are included.

EC – Konformitätserklärung / EC – Declaration of Conformity

SLOC GmbH Waltendorfer Gürtel 2, 8010 Graz, Austria, +43 316 395 396, office@sloc.one

SLOC GmbH hereby declares that the product

Basic Model:	SLOC-200-1
Hardware Type:	SLOC-200 ALL Components
Series:	200
Side Models:	SWB-200, SSC-200, SPR-200, STR-200, SLC-200, SCT-200, SMO-200

to which this declaration relates is in accordance with the provision of the following directives:

2014/53/EU Radio Equipment Directive-RED

2011/65/EU ROHS Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment and is in conformity with the following standards or other normative documents:

EN 62368-1:2014/AC:2015	Audio/video, information and communication technology equipment — Part 1: Safety requirements Electromagnetic compatibility and radio spectrum Matters (ERM); Part 1: Common technical requirements
EN 62311:2008	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz-300 GHz))
EN 301 489-1 V1.9.2	Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
EN 301 489-3 V1.6.1	Electromagnetic compatibility and Radio spectrum Matters (ERM), Electromagnetic Compatibility (EMC) standard for radio equipment and services, -- Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz
EN 301 489-52 V1.1.0	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 52: Specific conditions for Cellular Communication Mobile and portable (UE) radio and ancillary equipment
EN 300 440 V2.1.1	Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range
EN 301 511 V12.5.1	Global System for Mobile communications (GSM); Mobile Stations (MS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU
EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances



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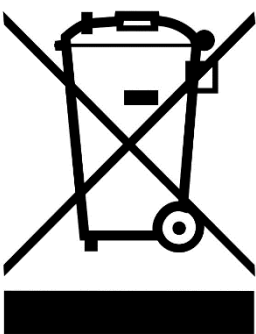
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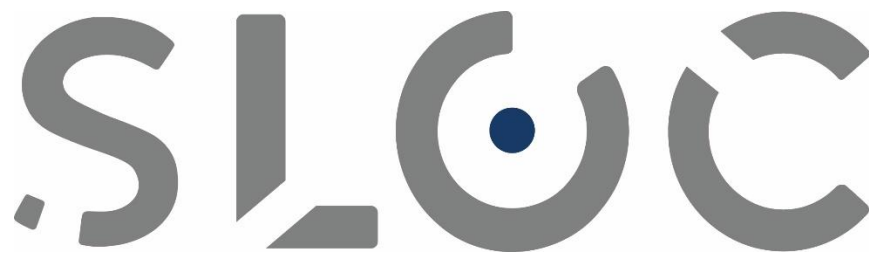
8.3. Disposal



This symbol on the product, the batteries or the packaging means that this product and the batteries it contains must not be disposed of with household waste. Instead, you must take the products and batteries to an appropriate collection point for the recycling of batteries, waste electrical and electronic equipment.

Separate collection and recycling helps preserve natural resources and prevents harm to human health and the environment from hazardous substances that may be released when batteries, electrical and electronic equipment are improperly disposed of.

For more information about collection points for batteries, electrical and electronic equipment, please contact your city/municipality, your waste management company or the retailer from whom you purchased this product.

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