

Neuron THS

User Manual Fleet Owner App

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Introduction

Before you start creating a user and using the app, we recommend that the sensors and gateway are completely installed. Follow the separate THS instruction manual for this.

The THS App is a Web App supporting all devices. To access the app, go to <https://neuronths.com/> in your web browser. Scan QR code below to access the app.



It is recommended that you use Google Chrome as browser to ensure that features are presented correct. Press the browser menu and add the page to your home screen to create an app icon. Note: for iPhone you will need to use Safari to be able to create app icon on Home screen. All screen shots in instruction are from smart phone and will appear different on PC screen.

Create app icon on your mobile device

Android

- Launch "Chrome" app.
- Open the website or web page you want to pin to your home screen.
- Tap the menu icon (3 dots in upper right-hand corner) and tap Add to home screen.
- You'll be able to enter a name for the shortcut and then Chrome will add it to your home screen.

iPad or iPhone

- Launch Safari app. *Please note that this does not work from the "Chrome" app.
- Enter the URL of the website you want to create a shortcut to. Tap Go.
- Tap the icon featuring a right-pointing arrow coming out of a box along the top of the Safari window to open a drop-down menu.
- Tap Add to Home Screen. The "Add to Home" dialog box will appear, with the icon that will be used for this website on the left side of the dialog box.
- Enter the name for the shortcut using the on-screen keyboard and tap Add. Safari will close automatically, and you will be taken to where the icon is located on your iPhone/iPad's desktop.

Registration and setup

Create user and log in

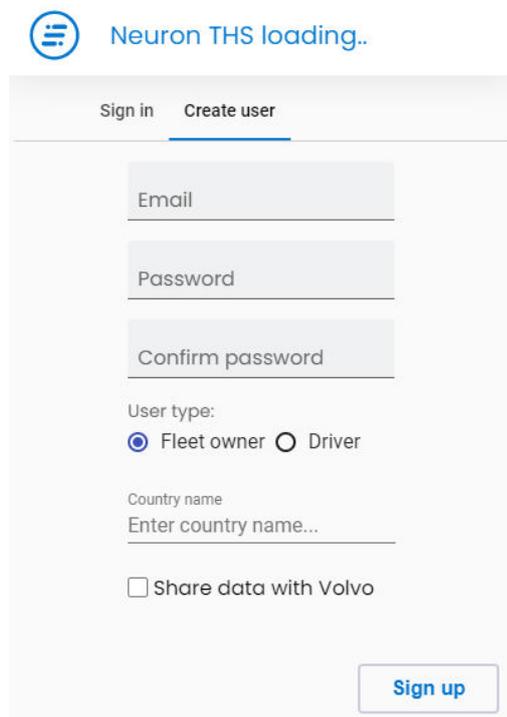
There are two ways a fleet owner user can be created.

1. If you have purchased THS from El-Watch and are responsible for installing the solution yourself, create your user here <https://neuronths.com/>

Select Create user and enter an email address and a password. PLEASE NOTE that this will be the main user for the fleet, and it may therefore make sense to choose e.g. the company email as the username.

Here you should also select the Fleet Owner as user type. User type Driver will only have access to vehicles that are assigned to them by a Fleet Owner, and will not be able to create new vehicles etc.

Choose Share data with Volvo if you have a Volvo truck and want to share information about tire pressure and temperature with Volvo Trucks for research and development of future alert functionality.



The screenshot shows a web interface for creating a user. At the top left is a blue circular icon with three horizontal lines, followed by the text "Neuron THS loading..". Below this is a navigation bar with "Sign in" and "Create user" (the latter is underlined). The form contains the following fields and options:

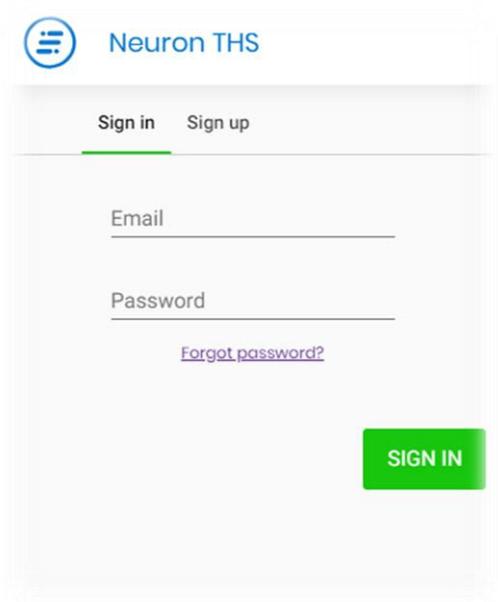
- Email: A text input field.
- Password: A text input field.
- Confirm password: A text input field.
- User type: Two radio buttons, "Fleet owner" (selected) and "Driver".
- Country name: A text input field with the placeholder "Enter country name...".
- Share data with Volvo: A checkbox.
- Sign up: A blue button at the bottom right.

2. If you are a Volvo customer and buy THS and installation through a Volvo dealer, the dealer will create a Fleet Owner user for you and send login information by email.

Start using the app

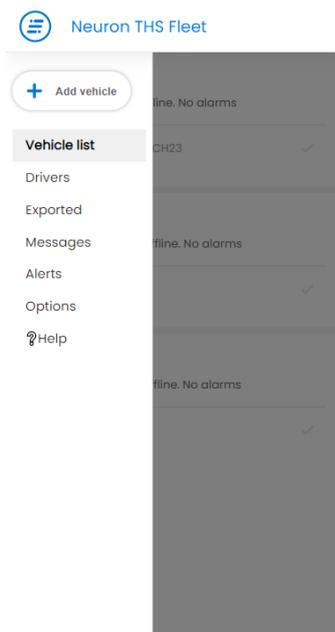
After sensors are placed in all wheels and the gateway is mounted as shown in the THS Installation manual, we can continue to set up the vehicle in the app.

After creating your user, sign into the app <https://neuronths.com/>

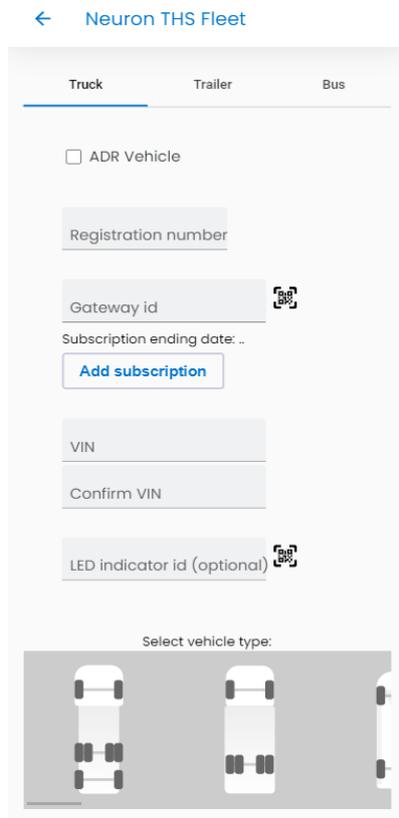


Add a vehicle

Tap the icon in the top left corner and then select add vehicle



Add Vehicle menu



← Neuron THS Fleet

Truck Trailer Bus

ADR Vehicle

Registration number

Gateway id 

Subscription ending date: ..

Add subscription

VIN

Confirm VIN

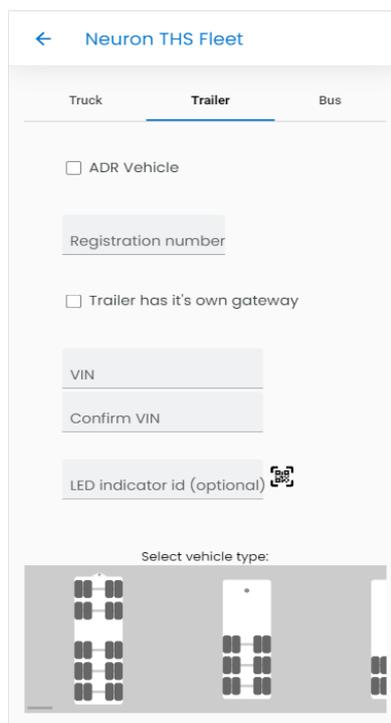
LED indicator id (optional) 

Select vehicle type:

1. Choose whether to add truck, trailer or bus
2. Check if you have one ADR vehicle
3. Enter the registration number
4. Scan or enter the gateway ID. A separate sticker label is included with the gateway to be placed in the driver's door during installation for this purpose.
5. Press Update subscription and scan the license code on the sheet you received when ordering. If you have not ordered a code, the system will work for 7 days before the code must be entered.
6. Enter VIN number (chassis number)
7. Confirm VIN number.
8. Enter the serial number on the Dashboard LED indicator (Optional accessory).
9. Select the correct vehicle type.
10. Tap on save vehicle.

Add a trailer



← Neuron THS Fleet

Truck Trailer Bus

ADR Vehicle

Registration number

Trailer has it's own gateway

VIN

Confirm VIN

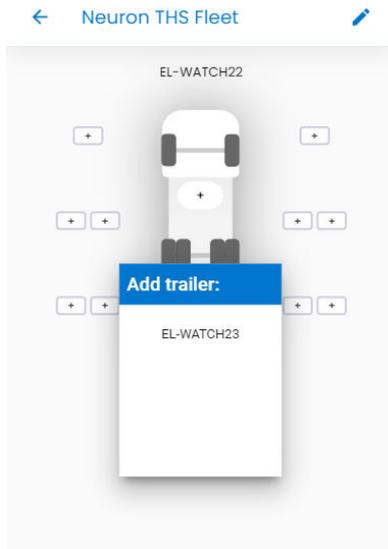
LED indicator id (optional) 

Select vehicle type:

1. Select trailer
2. Check if you have an ADR vehicle
3. Enter the registration number
4. If you have mounted a separate gateway on the trailer, tick off and scan or enter the gateway ID. A duplicate sticker label is included with the gateway to be placed in the driver's door or on the trailer itself during installation. Note that you do not need your own subscription for a trailer if it is connected to a truck with a valid subscription. The truck and trailer must be connected in the app for trailer sensor data to be updated
5. Enter VIN number (chassis number)
6. Confirm VIN number
7. Select the correct vehicle type
8. Tap save vehicle

Connect trailer to truck

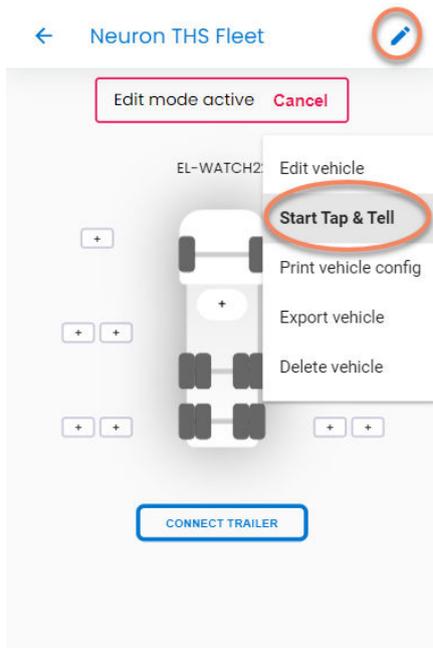


1. From the vehicle list, press the registration number of the truck you are to connect a trailer to
2. Press the Connect to trailer
3. Choose the correct registration number from the list and tap on it

Register sensors

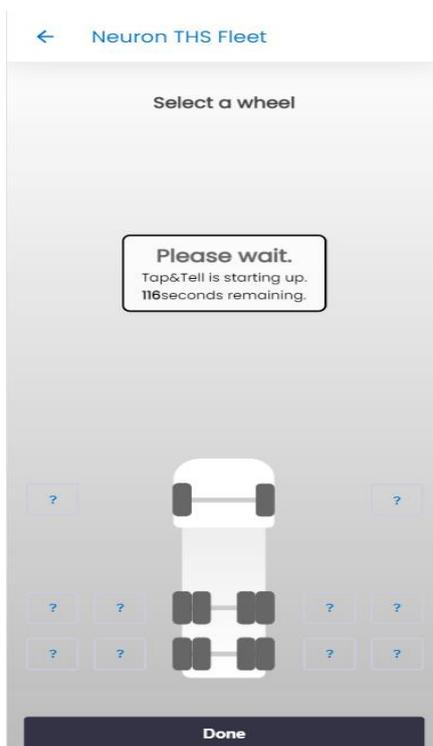
Tap & Tell method

Sensor registration can be done in several ways, but we recommend using Tap & Tell. It is the simplest and most efficient method. NOTE! The gateway must be powered for a minimum of 5 minutes before starting Tap & Tell. Tire pressure must be at least 1 bar to activate Tap & Tell



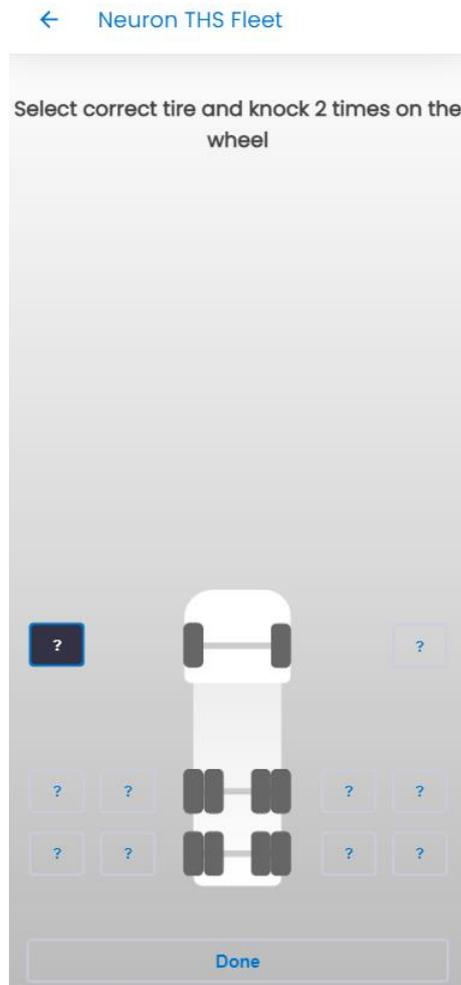
1. Select the correct vehicle from the Vehicle List
2. Activate edit mode by tapping the pencil in the right corner
3. Then press the 3 dots to the right of the truck to open the menu
4. Then select Start Tap & Tell
5. Scan the QR code on the duplicate label from the gateway located in the driver's door. If you do not have this, you must scan the box or the gateway itself under the vehicle.

Countdown



1. After scanning the gateway ID, you will see a countdown menu of 120 seconds. This is to ensure that all sensors on the vehicle are instructed to go into Tap & Tell mode. Wait until the countdown is complete.

Tap&Tell menu



1. After the countdown, you can start with Tap & Tell. Tap the box with ? – corresponding to the tire you want to register and hit twice in quick succession with a hammer. Hit the tire tread. When the sensor responds, a V appears in the box and you can move on to the next tire.
2. Continue until all sensors are registered
3. Perform the same procedure on the trailer as well. NOTE! The trailer must be connected to the truck in the app for Tap & Tell to work.

Tip 1

- If you experience problems getting a response from the sensor, there are some simple tricks
- Hit another spot on the tire
- The sensor may have missed the Tap & Tell message from the gateway, try to proceed in the registration and return to the sensor that does not respond at the end of the registration.
- The sensor can be placed in a difficult position radio-wise, e.g. at the back of a trailer or in the shadow of a toolbox. Move the vehicle forward e.g. one meter and try again.

Tip 2

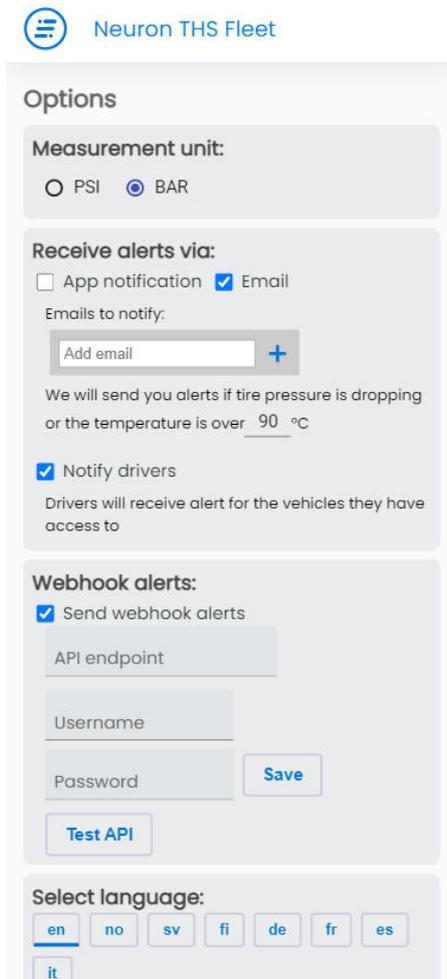
If you have replaced one sensor or changed tire position you do not need to hit all the tires when registering, only the tire(s) where you want to register a new sensor(s).

Manual registration

Sensors can also be registered manually by pressing the + sign after selecting the vehicle in the Vehicle List. Then scan the QR code printed on the sensor or enter the serial number manually.

Note: Mistyped serials are often cause of error and manual registration is therefore not recommended.

Options



Neuron THS Fleet

Options

Measurement unit:

PSI BAR

Receive alerts via:

App notification Email

Emails to notify:

+

We will send you alerts if tire pressure is dropping or the temperature is over 90 °C

Notify drivers

Drivers will receive alert for the vehicles they have access to

Webhook alerts:

Send webhook alerts

Select language:

1. By tapping the icon in the left corner and selecting Options, you will see the menu on the left
2. Here you can choose between PSI or BAR
3. Select how you want to receive alarms. App Alerts works like a regular push alert from an app. Note that app alerts must be enabled for the browser to work. App notification is not supported on iPhone. Email notification works independently of app notification, and you can add as many recipients as you want.
4. Notify drivers. Check here if you want drivers who have access to your vehicles to be notified. Note that the driver must have activated notification in their Driver app to receive notification.
5. Webhook alerts are explained in a later chapter
6. Select language
7. If you want to share data with Volvo, uncheck it. Data will be used in research purposes. Data transmitted is vehicle information as well as pressure and temperature data from each sensor.
8. Use of the API Key is explained in a later chapter

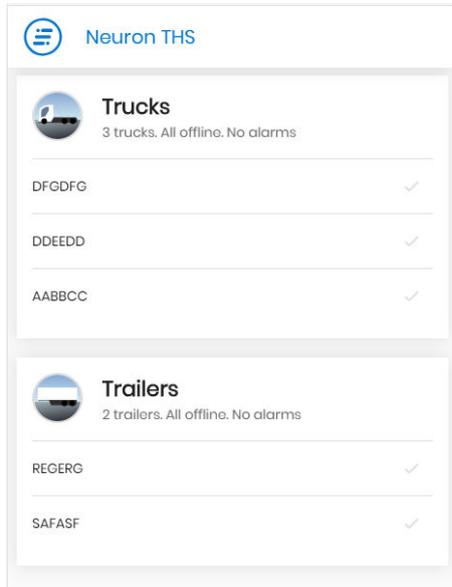
Alarms

Pressure alarm level is automatically calculated and can't be set by the user. In addition, there is a low-pressure alarm with a fixed threshold at 6 bars.

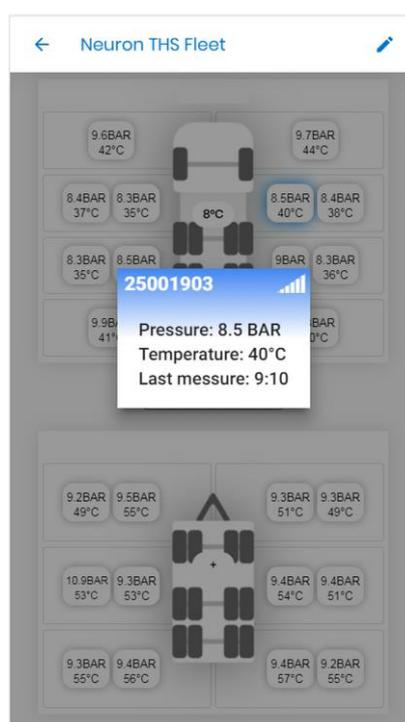
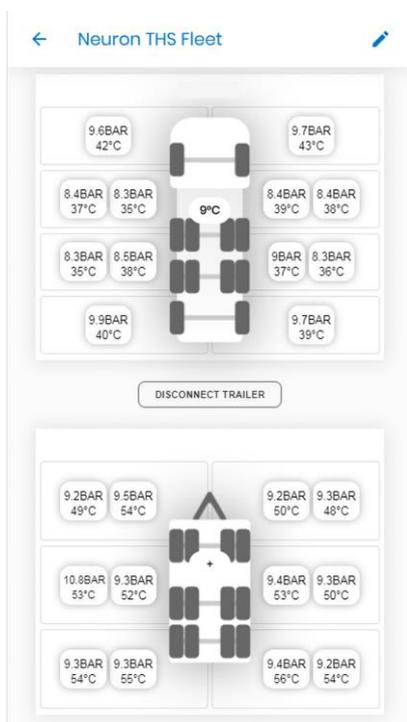
Note that the temperature alert limit can be adjusted, the level is set for the entire fleet.

App start screen

Here you will find a list over your vehicles.

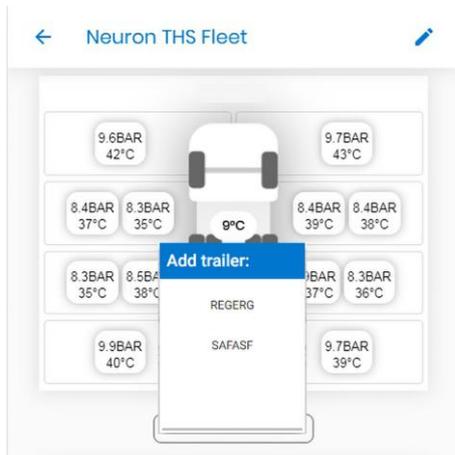


By pressing the registration number, you will get a detailed overview over the vehicle showing the pressure and temperature of each tire. Pressing on the tire icon give you even more information of serial number, signal strength and time of last measure.



Connecting a trailer

Choose the vehicle you want to connect to a trailer in the vehicle list. Then by pressing the Connect Trailer button a list of available trailers will show and simply pressing the correct registration number will connect the trailer to the truck. It is possible to connect several trailers e.g. when you have a dolly.

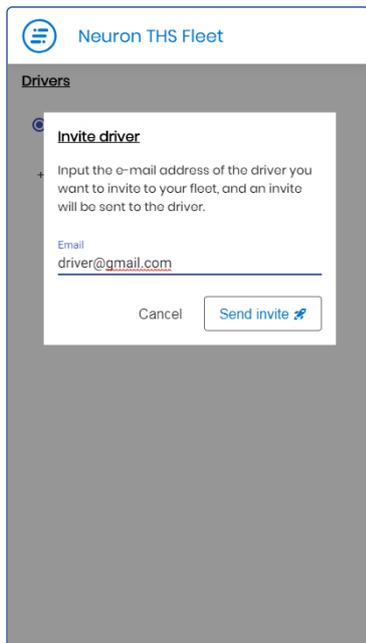


Assign drivers to vehicles

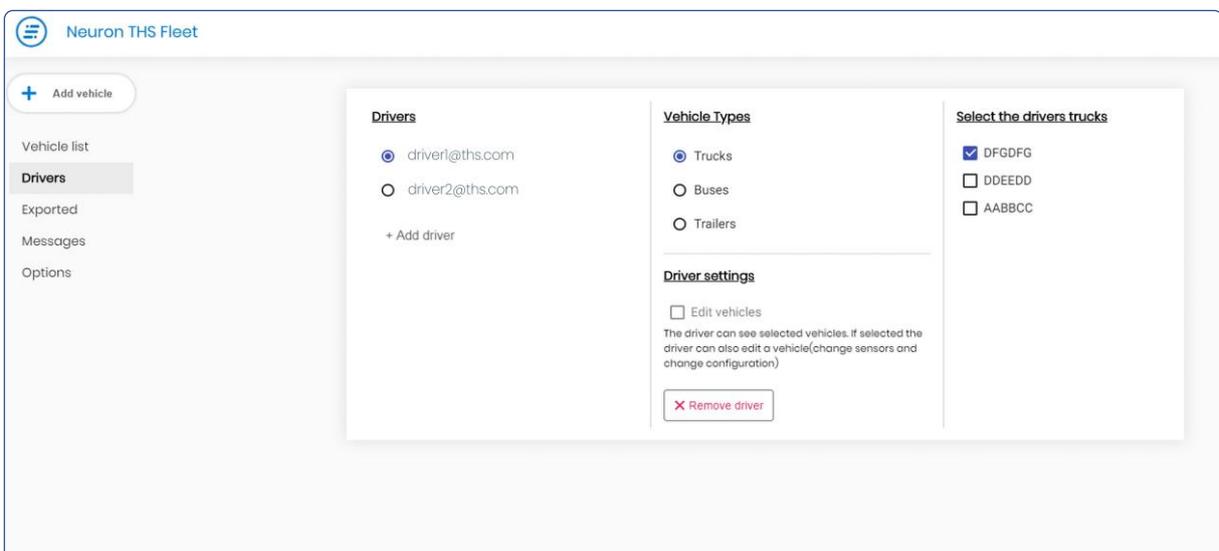
In Fleet Owner mode you can assign some or all your vehicles to other THS app users. This will allow other to see the assigned vehicle in their app and get alarm notification from the vehicle.

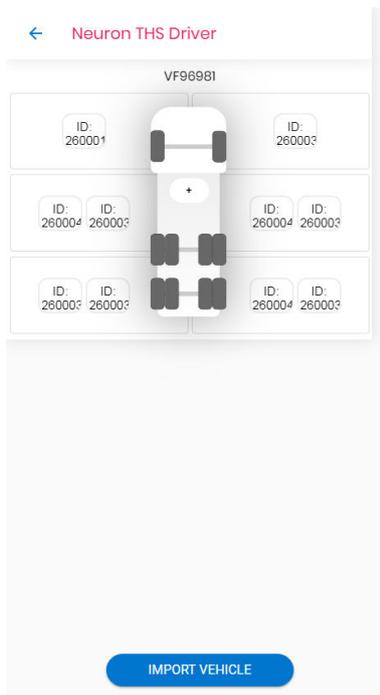
Press the menu button in top left corner and choose the Drivers button. Choose add driver and send an invite using the drivers correct e-mail. The driver will get an invite message that will need to be accepted, before proceeding to assign vehicles to the driver.

Note that the driver you invite needs to create a user prior to the invite.



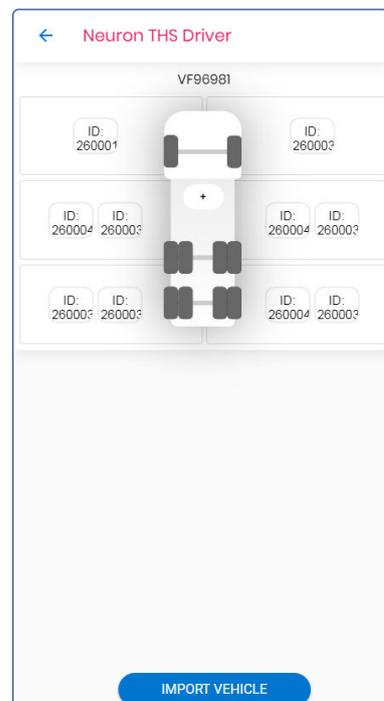
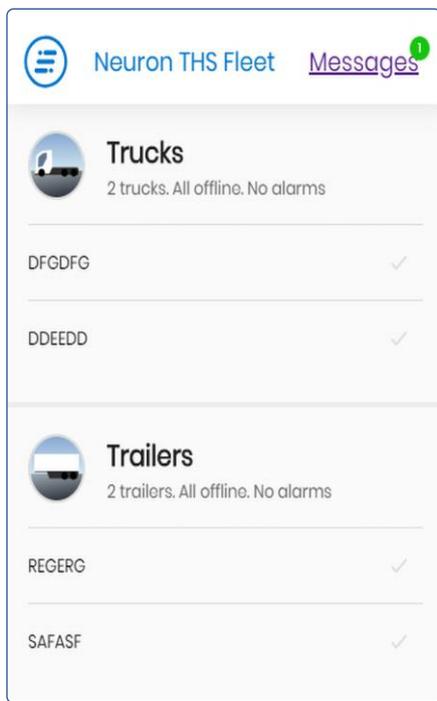
After your driver have accepted your invitation, you simply choose driver, vehicle type and registration number and the vehicle will appear in the drivers app. Note that the screen dump below is from a PC. If you are on a smartphone slide left to see all content.





Receive vehicle from dealer

When a dealer installs a THS system on your vehicle the dealer will export the set up to your user account when the installation is done. You will get a message in your app that will need to be accepted before receiving data from the vehicle. Press the message button and accept the import.

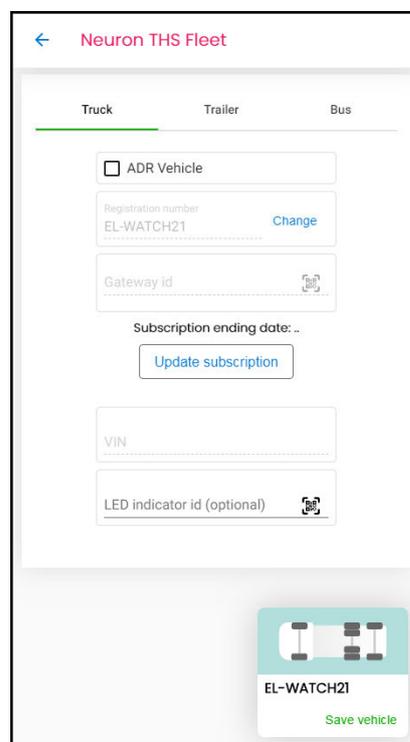
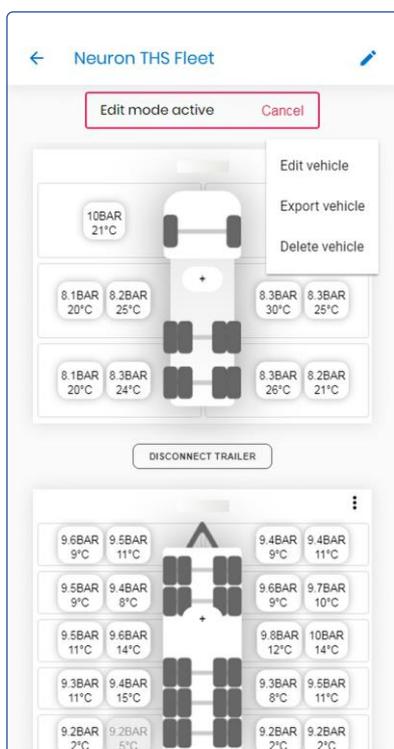


Make changes to a vehicle

As Fleet Owner you are able to do some changes to the THS set up. This includes Update Subscription, change registration number and to install a LED indicator in the cabin. Fleet Owners are also able to install/change sensors on their vehicles.

Edit vehicle

Choose the vehicle from the vehicle list and press the pen in top left corner to activate Edit mode. Then press the 3 dots in left corner of vehicle and choose Edit vehicle. Then you will be able to update the subscription. New subscription code must be purchased from your Volvo dealer. Note that the new code will add days to the existing subscription, there is no need to wait for the subscription to run out before entering the new code. You can also edit the Registration number if it is changed or typed in wrong. If you acquire a LED indicator for the cabin you will have to register the id of the LED in this menu. Press Save vehicle to save changes.



Add sensors

As a Fleet Owner you are able to install and add sensors to your vehicle. Prior to doing this a THS gateway needs to be installed at a Volvo Workshop.

There are two ways of adding sensors to a vehicle, the preferred and most efficient way is the Tap & Tell method. Sensor can also be registered by scanning the QR-code at the side of the sensor, but this needs to be done prior to placing the sensor in the tyre.

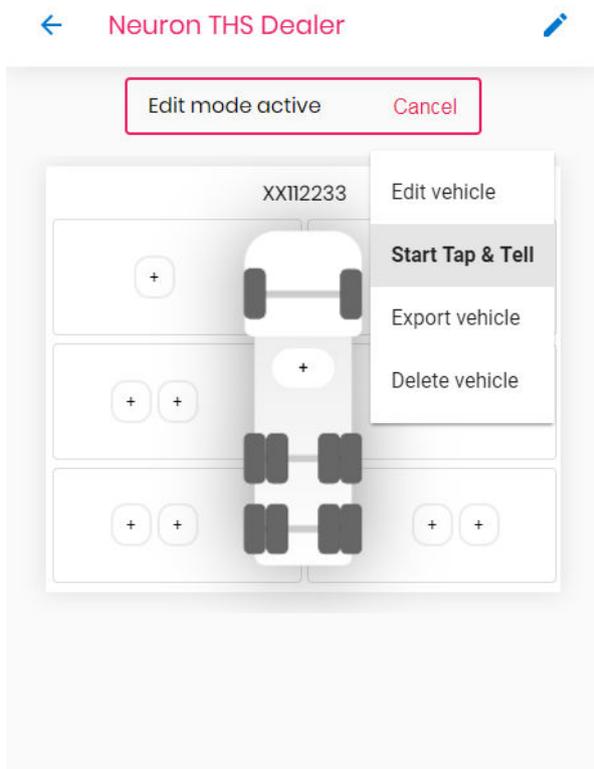
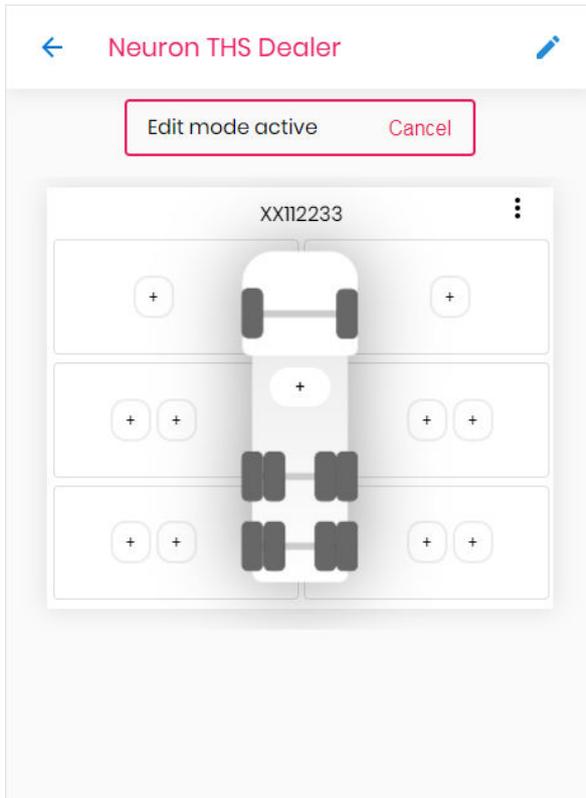
Tap & Tell

Tap & Tell is the recommended and most efficient way of adding sensor to the vehicle. When Tap & Tell is activated you simply knock the tyre twice with a hammer to detect what sensor is inside the tyre.

Note that the tyre pressure needs to be above 1.0 bars to be able to use this mode.

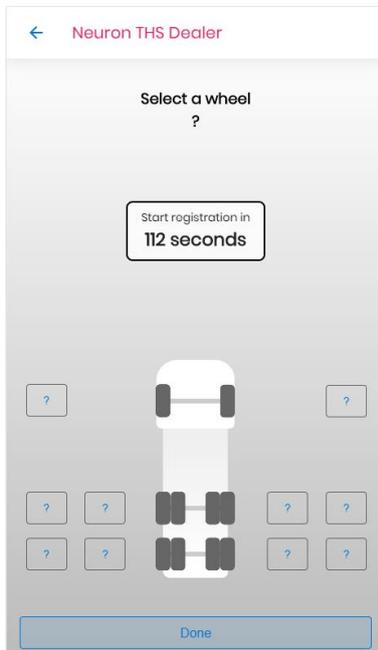
Note that the gateway needs to be powered and online to be able to perform Tap & Tell.

Choose the vehicle you want to add sensor to and press the pencil in upper right corner to activate edit mode. Then press the three dots and choose Start Tap & Tell.

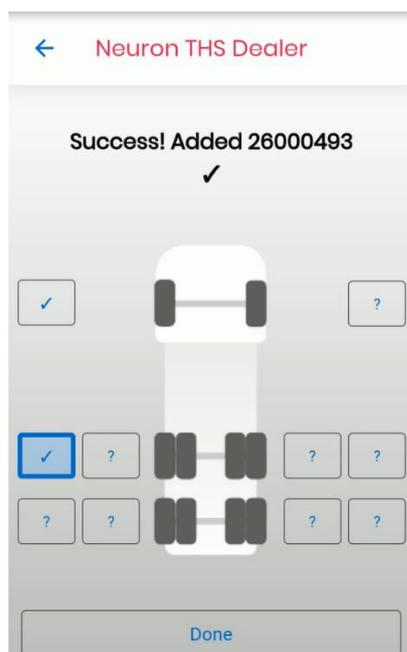
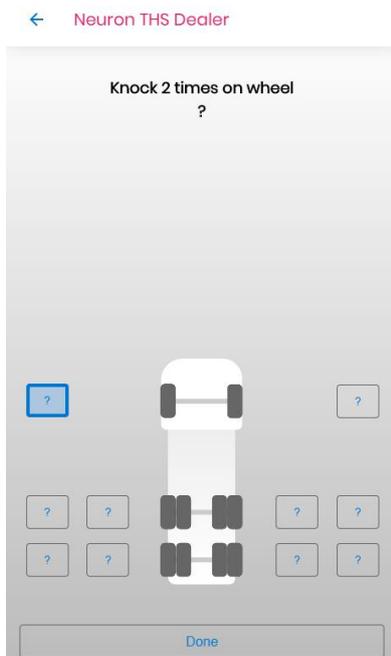


To ensure that the correct gateway is activated you will have to scan (or type in) the gateway serial number. Scan the gateway label placed in the door pillar of the truck.

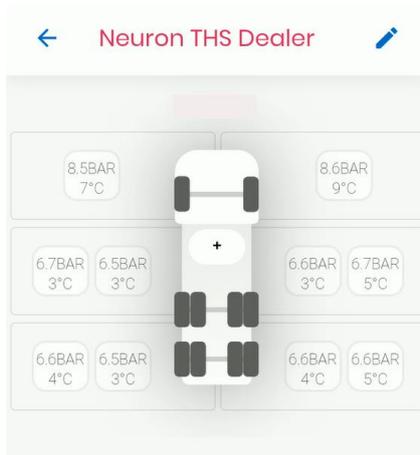
After scanning the gateway serial number, a countdown of 120 seconds will begin. This is to ensure that Tap & Tell mode are activated on all sensor of the truck.



When the countdown is finished you mark the tyre you want to register in the app and knock twice with a hammer. The two knocks need to be within a second to be registered. Observe that the changes to before you move on to the next tyre. This will happen within a second, if not, repeat the two knocks.



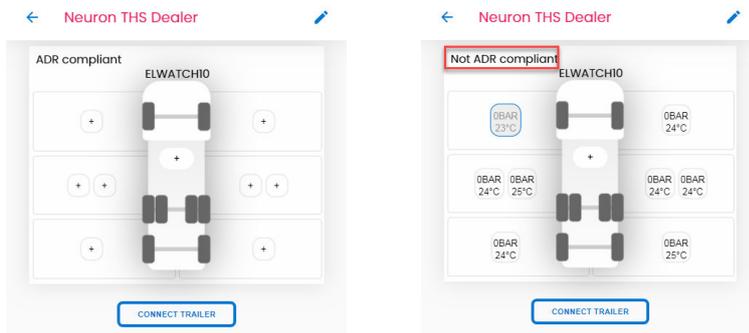
After all the tyres are registered press done and observe that you have pressure data in all tyre positions.



ADR Sensors

To be able to use THS on ADR vehicles you must make sure to use ADR approved sensors. These sensors are not the same as standard THS sensors and will have a different part number. After installing the sensors, the app will confirm (or warn if not) all sensors are ADR approved. This functionality will not work if the ADR check box during creating vehicle is not checked.

Note: from 1st January 2021 the standard THS sensor was discontinued and only ADR approved sensors will be available for the future



Register sensors on trailer

Most trailers will not have a gateway and therefore will need to be connected to a truck to be able to register the sensors. Create the trailer the same way as for truck and connect the trailer to a truck in the app. Then choose the trailer, activate the Tap & Tell mode by scanning the trucks gateway, and proceed with registration the same way as for a truck.

Note that the tyre pressure needs to be above 1.0 bars to be able to use this mode.

Note that the gateway needs to be powered and online to be able to perform Tap & Tell.

Registration with QR code

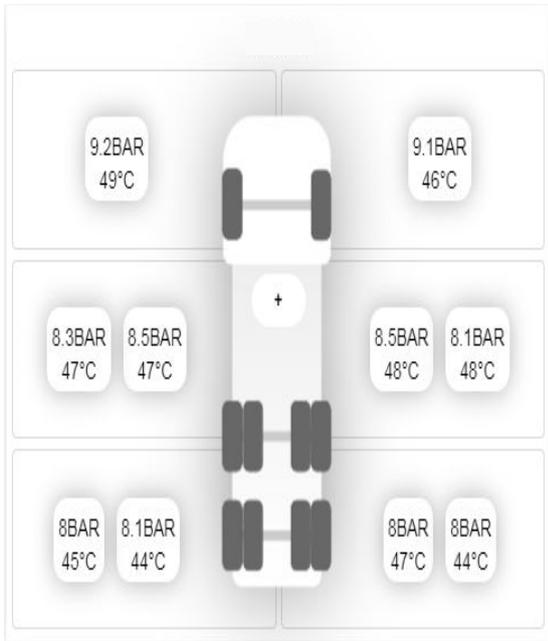
This method requires that you know the position of the tyre you are working on and scan the QR code when placing the sensor inside the tyre. It is therefore not a recommended method of registration for an entire vehicle.

Choose the vehicle from the vehicle list, press the  button corresponding to the correct tyre and preferably scan the QR-code on the side of the sensor. Use your smart phone or a QR scanner. If a QR-scanner is to be used the cursor needs to be in the enter id-field before scanning. The serial number may also be entered manually, make sure to enter correct number. Do so for all sensors, and they will appear in the app after connection is made between sensor and gateway. This is done automatically but may take a few minutes. Note that the gateway needs to be powered and online to enable connection.



Add ambient sensor

Ambient sensors are normally mounted behind the front hood on the cabin. Press the + sign in the middle of the truck and add the sensor by scanning the QR code at the side of the sensor.



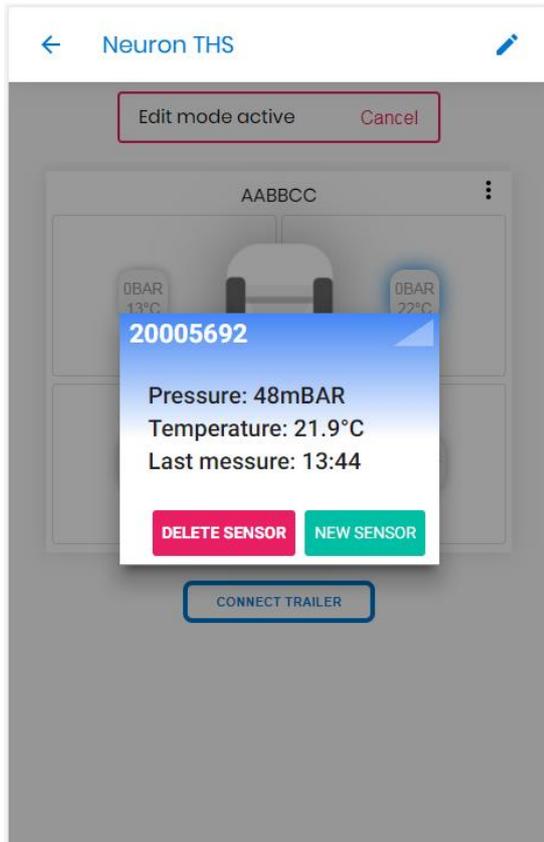
Examples of where to place the ambient sensor



Replace sensor

Tap & Tell may also be used when replacing a sensor. Use the same procedure as described in the Tap & Tell chapter, but now you only need to register the new sensor. Let all the others be and press Done.

To replace a sensor using QR code, activate the editing mode by pressing the pencil in upper right corner. Then press the sensor icon that is to be replaced and press Delete sensor to remove it, or New sensor to change it. By pressing New sensor, you will be able to scan the QR code of the new sensor.



Additional features

Webhook alerts

Here you can set up alerts to a defined endpoint.

The message is sent in JSON UTF-8 and are as defined:

Field	Description
Registration Number	Registration number of the truck or trailer
timestamp	Alert timestamp in UTC formatted according to ISO 8601
type	Slow leak = 0, fast leak = 1
currentPressure	Current pressure level (bar)
pressureLimit	Alert pressure limit (bar)
temperature	Current temperature (Celsius)
temperatureLimit	Alert temperature limit (Celsius)
axle	Axle number
wheel	Inner wheel = 0, outer wheel = 1
side	left = 0, right = 1
link	Web link from THS with alarm info

Example

```
{
  "registrationNumber": "ABC-123",
  "timestamp": "2020-11-04T11:25:43Z",
  "type": 0,
  "currentPressure": 6.5,
  "pressureLimit": 6.8,
  "temperature": 50,
  "temperatureLimit": 60,
  "axle": 1,
  "wheel": 1,
  "side": 0,
  "link": "https://neuronths.com/fjeg37sdshtyl"
}
```

Use of API

It is possible to receive data by use of API. Please contact El-Watch for more information.

Troubleshooting

Problems with app

If you experience problems with the app, please delete your browser cache. On your PC press ctrl+F5.

In the Chrome app on android

- On your Android phone or tablet, open the Chrome app.
- At the top right, tap More.
- Tap History. Clear browsing data.
- At the top, choose a time range. To delete everything, select All time.
- Next to "Cookies and site data" and "Cached images and files," check the boxes.
- Tap Clear data.

In the Chrome app on iPhone

- On your iPhone or iPad, open the Chrome app.
- At the bottom, tap More.
- Tap History. Clear browsing data.
- Make sure there's a check mark next to "Cookies, Site Data," and "Cached Images and Files."
- Tap Clear browsing data.

Warranty and Service

Disclaimer of Warranties and Liabilities

THS product warranty is for a period of 12 months from the date of purchase. It is the duty of the buyer of the product to check that the delivered item is in accordance with the order. Warranty repair, rectification or settlement shall be performed by El-Watch or approved partner. Our standard return form must be used. In all cases, liability is limited to the item's invoice value. El-Watch will not be liable for any direct or consequential damages or loss.

Support

If you have questions or are experiencing problems with your THS please contact your local Volvo Dealer who will assist you.

Disposal

The THS parts can be returned to your local Volvo Dealer for disposal.