Excavator configuration: Creating and configuring the vehicle

In this article, you'll learn how to configure an excavator, including how to create and measure the vehicle and identify its key structural components.

Tip: To ensure proper alignment during antenna installation, use a laser level measuring tool to project accurate measurements onto the excavator. For optimal accuracy, laser-based measuring instruments are recommended. However, if these are not available, traditional measuring tools can be used as an alternative.

Before starting the vehicle creation and measurement process, it's important to understand the main components involved. The glossary below provides definitions of key terms to help you get started.

Glossary: Understanding key terms

Below, you find definitions of essential terms that will help guide you through the process of creating and measuring a vehicle.

- **Joint**: A pivot point that connects two segments, allowing movement between them.
- **Link**: The structural segment located between two joints.
- **Rotation axis**: The joint connecting the vehicle's structure to its tracks. This allows the vehicle to rotate in place without moving the tracks.
- **Boom**: The first main segment of an excavator, typically attached directly to the base.
- **Arm**: The second segment of the excavator, connected to the boom.
- **Head**: The final segment of the excavator, which may include functional tools such as a planting head or a drill.

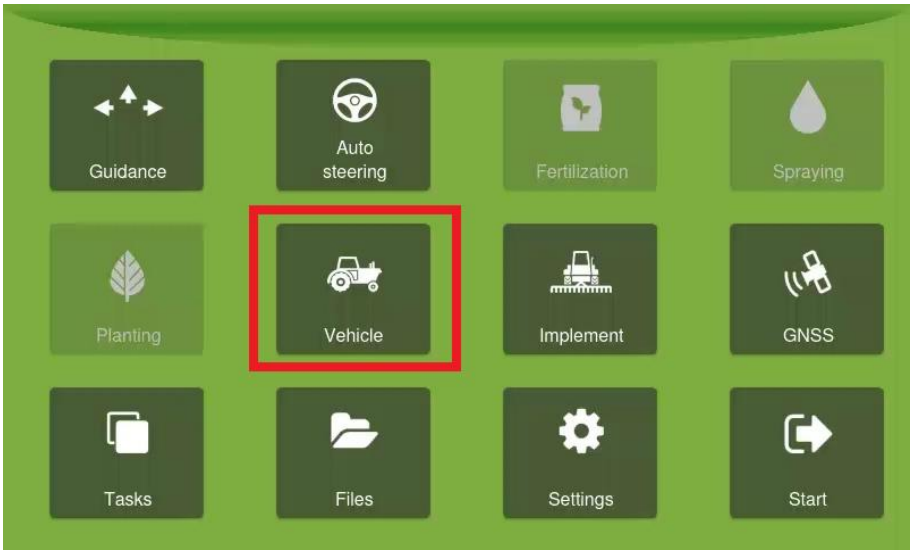
Now, you will learn how to create a vehicle on your display.

Selecting the vehicle and setting its measurements

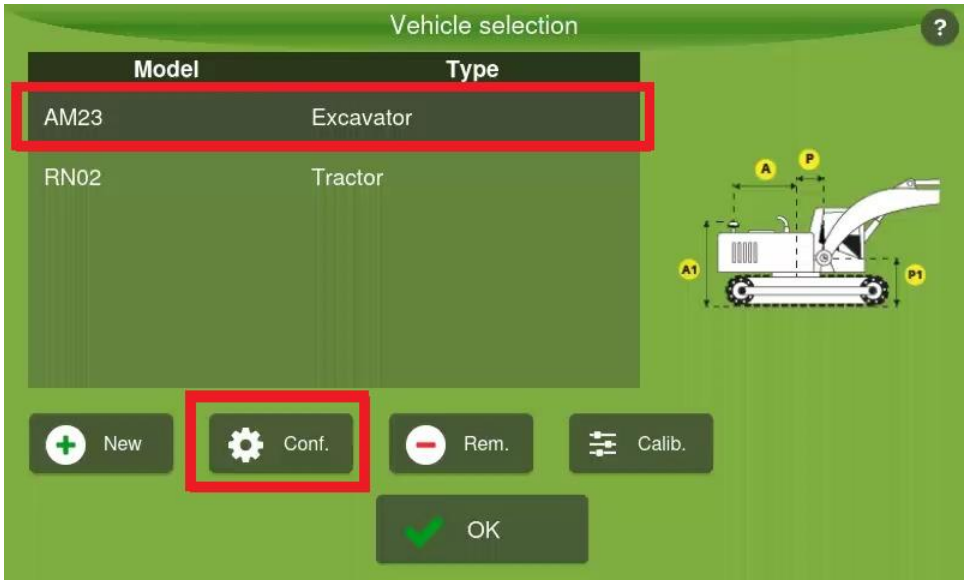
Follow the steps below to select a vehicle:

1. Open the menu on the operations screen by clicking the arrow on the left-hand side, then selecting the menu button as shown below:

2. Then, select the **Vehicle** option.

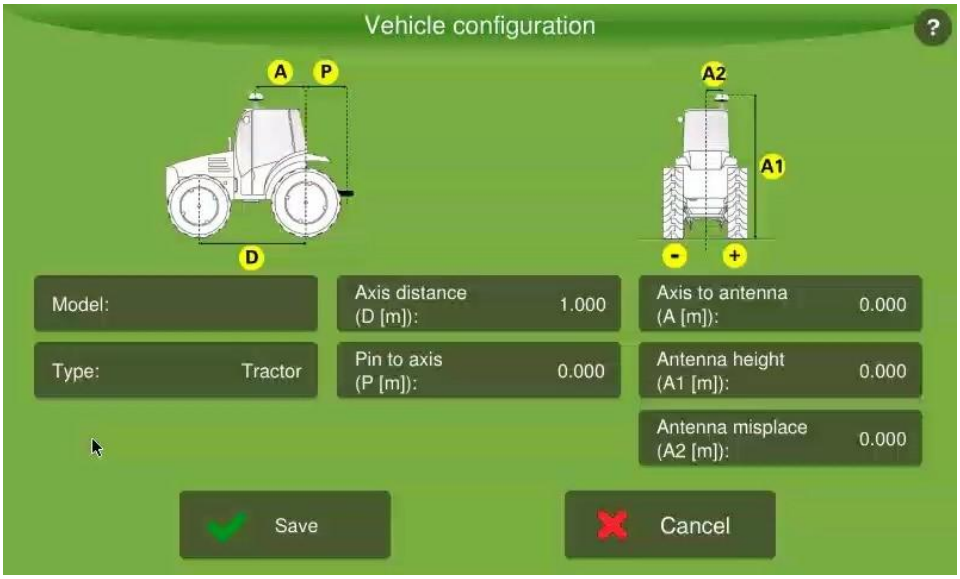


3. Now, under the vehicles list, select **Excavator**. Then, click the **Conf.** button to set its configuration.



Note: The vehicle will be created by Hexagon's technical team.

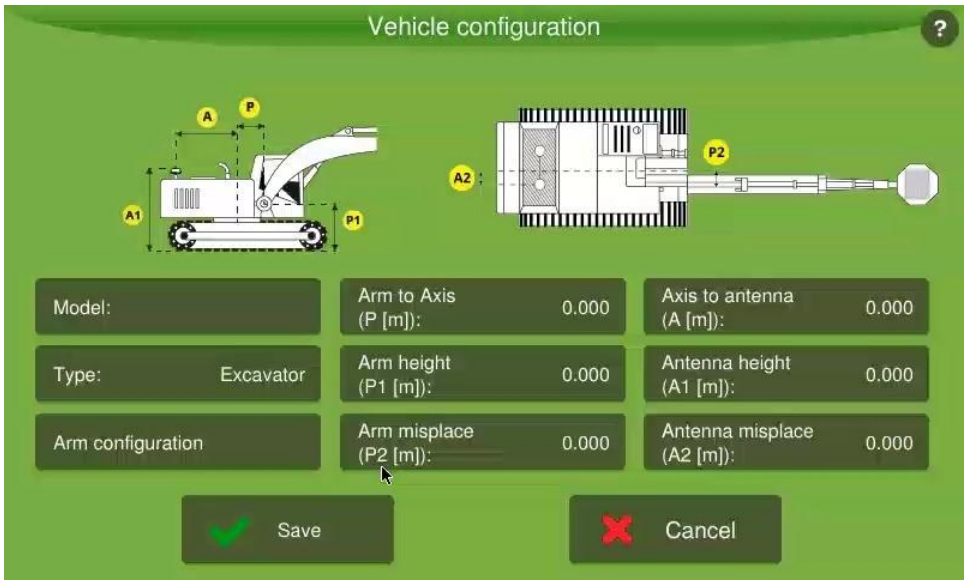
4. You will be taken to the **Vehicle configuration** page. First, type in the vehicle model and next.



5. Now, it's time for you to set the vehicle measurements.

- **Arm to Axis (P)**: Measured in meters from the distance from the center axis of the boom to the center of rotation of the excavator (Swing).

- **Arm height (P1)**: Measured in meters of height of the boom axis in relation to ground level.
- **Arm misplace (P2)**: Measured in meters, it is the distance between the center of the excavator's swing axis (center of rotation) and the actual mounting position of the boom arm along that axis.
- **Axis to antenna (A)**: Measurement in meters of the distance from the center of the antennas to the center of rotation of the excavator (swing).
- **Antenna height (A1)**: Measured in meters of the height of the antennas in relation to ground level.
- **Antenna misplace (A2)**: Measured in meters from the distance of the antenna in relation to the center of the excavator.



Note: It is possible to request the engineering team to create a configuration file with the vehicle measurements preset, in case the installation is done in multiple of the same model vehicles.

You've finished configuring your vehicle!