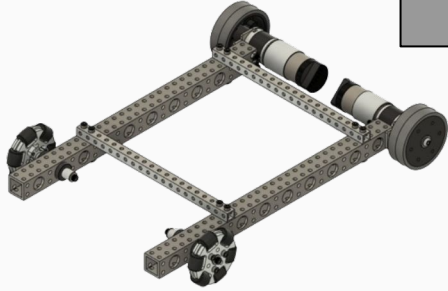


The background is a solid blue color with a repeating pattern of white icons. These icons include various electronic components like gears, stars, resistors, capacitors, and integrated circuits, as well as tools like wrenches, pliers, and screwdrivers. The pattern is dense and covers the entire page.

REV Electronics Setup Guide

Parts List



Your Robot



Slim Battery



REV Control Hub

USB-A to USB-C Cable



Parts List (contd.)

Switch (Optional)





Instructions

Step 1: Looking at the robot from the back, plug the motors into the corresponding JST ports on the Control Hub.



Left Motor to Port 0



Right Motor to Port 1



For reference, use the side of the robot with the motors as the back of the robot.

Step 2: Connect the battery to the male XT30 port the Control Hub.



Step 3: Download the REV Hardware Client.

<https://docs.revrobotics.com/rev-hardware-client/>

REV REV HARDWARE CLIENT

Q Search Ctrl + K

REV Hardware Client Overview

Changelog

GETTING STARTED

Installation

Navigating the Client

Troubleshooting

REV DUO

Control Hub

Driver Hub

Expansion Hub

Android Devices

Using the Log Viewer

REV ION

SPARK Flex

REV Hardware Client Overview

The REV Hardware Client is software designed to make managing REV devices easier for the user. This Client automatically detects connected device(s), downloads the latest software for those device(s), and allows for seamless updating of the device(s)

[REV Hardware Client - Version 1.6.6](#)

i You can also download the REV Hardware Client using an offline installer, bundled with software as of April 12, 2024:

- [Offline Installer bundled with FRC software](#)
- [Offline Installer bundled with FTC software](#)
- [Offline Installer bundled with all available software](#)

i As of April 12, 2024 Windows 10 or later is required for the latest version of the REV Hardware Client. [Please use 1.6.4 if you are on an older version of Windows.](#)

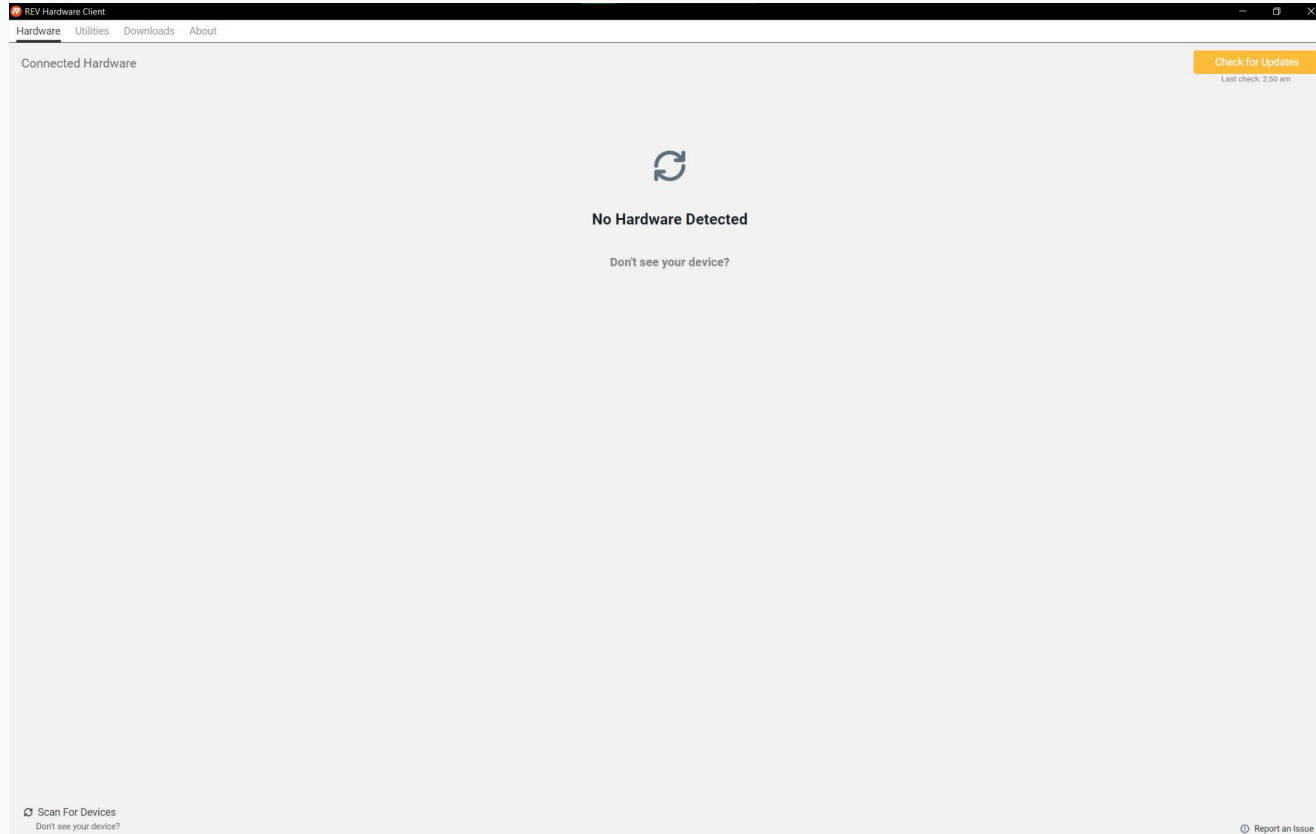
Feature Summary

Supported Devices

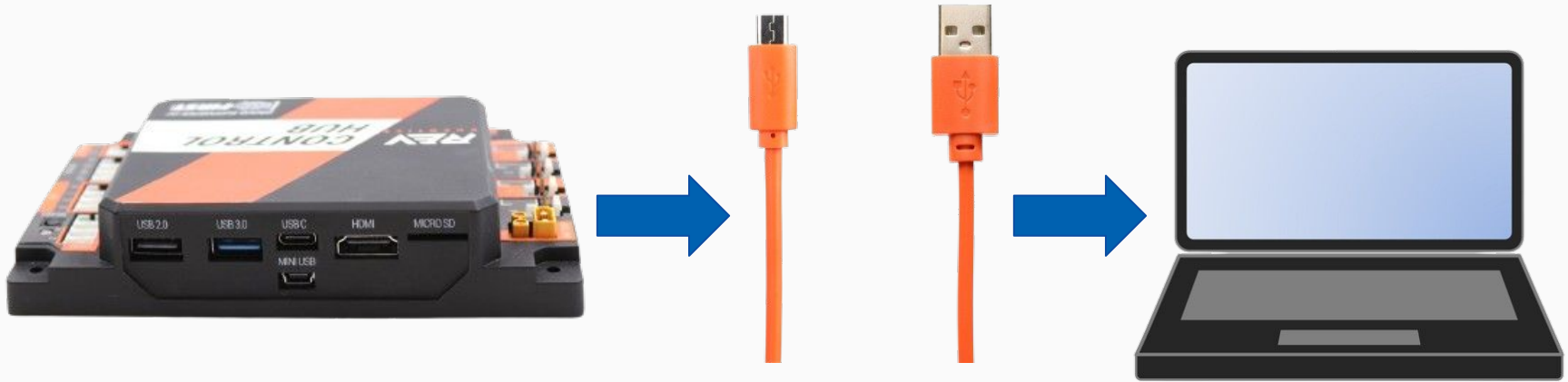
Was this helpful?

Export as PDF

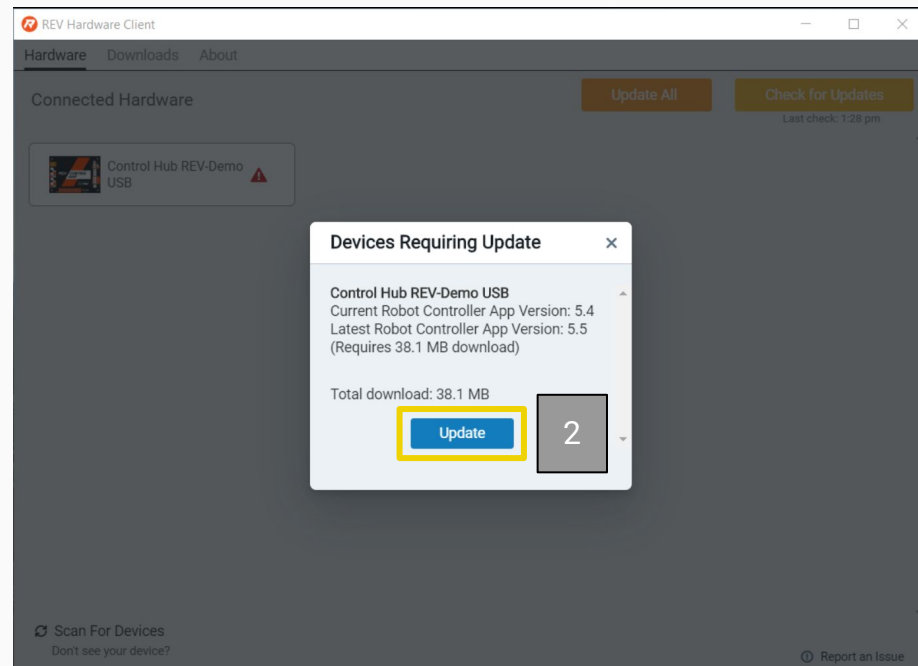
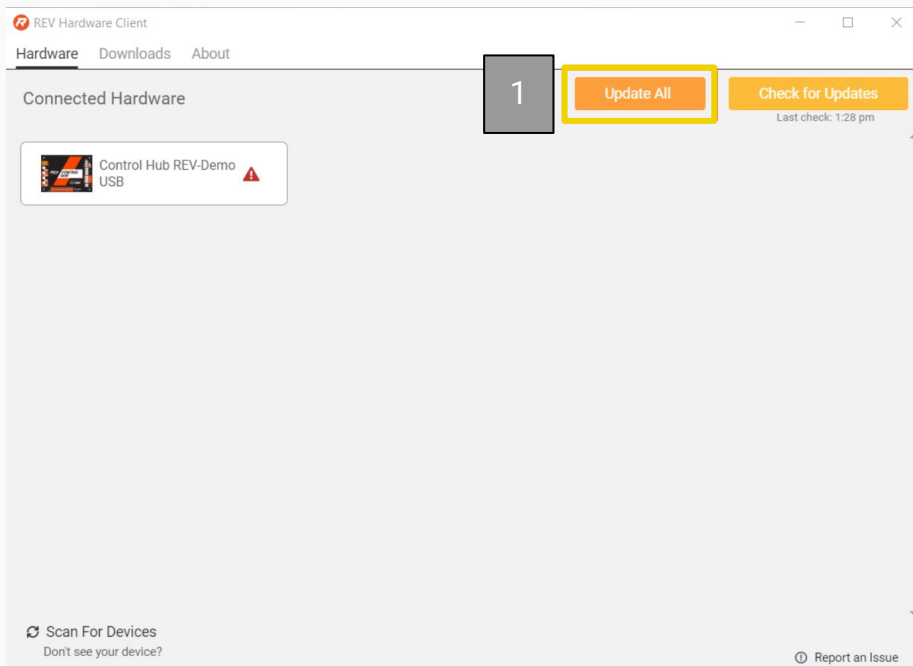
Step 4: Open the REV Hardware Client.



Step 5: Connect the Control Hub to your computer using a USB-A to USB-C connector cable.



Step 6: Update the Control Hub's firmware



Step 7: Navigate to the “Manage” page.

The screenshot displays the REV Hardware Client application window. The interface includes a top navigation bar with 'Update', 'Program and Manage', and 'Backup / Restore' options. A left sidebar shows 'Connected Hardware' with a list of devices, including 'Control Hub REV-Demo'. The main content area displays system information for the selected device, such as 'Robot Controller version: 9.0.1' and 'Control Hub OS version: 1.1.3'. Below this, the 'Wi-Fi Settings' section allows for configuring the network name, password, and band. A 'Manage' button is highlighted in the sub-navigation bar, indicating the current page.

1. Control Hub REV-Demo (USB)

2. Program and Manage

3. Manage

Control Hub REV-Demo

Update Program and Manage Backup / Restore Send Diagnostics to REV

Robot Controller version: 9.0.1
Control Hub OS version: 1.1.3
REV Hubs: Control Hub
Firmware version: 1.8.2
IMU: BHI260AP

Wi-Fi Settings

Name
REV-Demo

New Password

Confirm Password

☐ Show Password

Wi-Fi Band
☐ 2.4 GHz ☒ 5 GHz
The 5 GHz Wi-Fi band is highly recommended, unless you need to connect older devices that only support 2.4 GHz Wi-Fi.

Wi-Fi Channel
auto (5 GHz)

Apply Wi-Fi Settings

You will need to reconnect to the new Wi-Fi network after changing the Control Hub's name and/or password.
If you are unable to connect to the Control Hub's network after switching to the 5 GHz band, you can perform a Wi-Fi factory reset by holding down the Control Hub's button while you turn it on, until you see a rapid sequence of color changes on the Control Hub's light. The Wi-Fi network name and password will be reset to their default values, and the Wi-Fi band will be set to 2.4 GHz.

Download Robot Controller Logs
Examination of activity logs from the robot controller can sometimes help diagnose problems and bugs.

☐ Scan For Devices
Don't see your device?

Report an Issue

Step 8: Name your Control Hub something memorable and recognizable and set the password to “password,” then press “Apply WiFi Settings.”

The screenshot shows the REV Hardware Client interface. On the left, a sidebar lists 'Connected Hardware' with a 'Control Hub REV-Demo' entry. The main window displays the 'Control Hub REV-Demo' configuration page. The page has a blue header with navigation tabs: 'Update', 'Program and Manage', and 'Backup / Restore'. Below the header, there's a red bar with 'FIRST' and 'OnBotJava' tabs. The main content area shows system information: 'Robot Controller version: 9.0.1', 'Control Hub OS version: 1.1.3', and 'REV Hubs: Control Hub' with 'Firmware version: 1.8.2' and 'IMU: BHI260AP'. A yellow box labeled '1' highlights the 'Wi-Fi Settings' section, which includes input fields for 'Name' (REV-Demo), 'New Password' (masked with dots), and 'Confirm Password' (masked with dots), along with a 'Show Password' checkbox. Below this, the 'Wi-Fi Band' is set to '5 GHz' and the 'Wi-Fi Channel' is set to 'auto (5 GHz)'. A blue box labeled '2' highlights the 'Apply Wi-Fi Settings' button. At the bottom, there's a 'Download Robot Controller Logs' section and a 'Report an Issue' link.

REV Hardware Client

Hardware Utilities Downloads About

Connected Hardware

Check for Updates
Last check: 3:03 am

Control Hub REV-Demo
USB

Control Hub REV-Demo

Update Program and Manage Backup / Restore Send Diagnostics to REV

FIRST robot controller interface Blocks OnBotJava Manage

Robot Controller version: 9.0.1
Control Hub OS version: 1.1.3
REV Hubs: Control Hub
Firmware version: 1.8.2
IMU: BHI260AP

Wi-Fi Settings

Name
REV-Demo

New Password

Confirm Password

☐ Show Password

Wi-Fi Band
☐ 2.4 GHz ☒ 5 GHz
The 5 GHz Wi-Fi band is highly recommended, unless you need to connect older devices that only support 2.4 GHz Wi-Fi.

Wi-Fi Channel
auto (5 GHz)

Apply Wi-Fi Settings

You will need to reconnect to the new Wi-Fi network after changing the Control Hub's name and/or password.

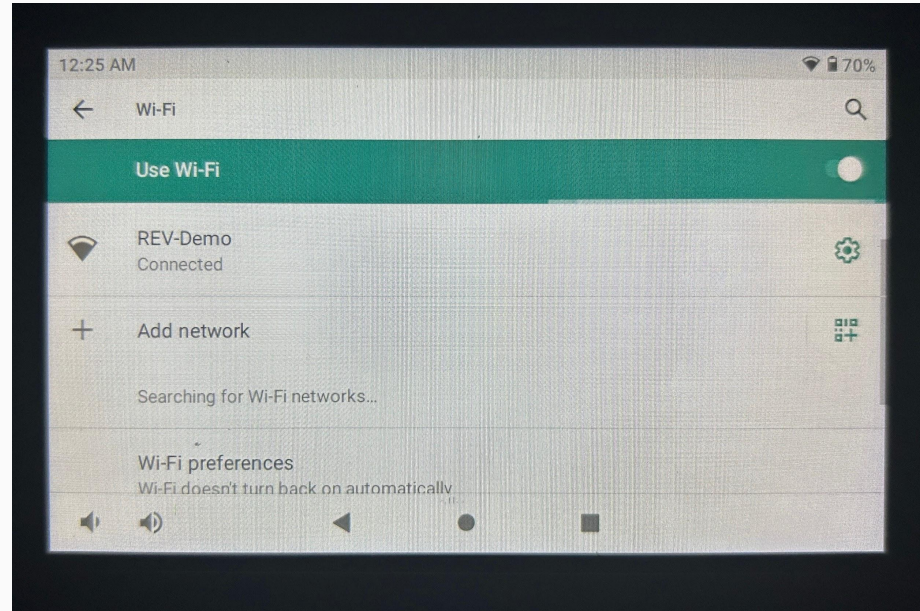
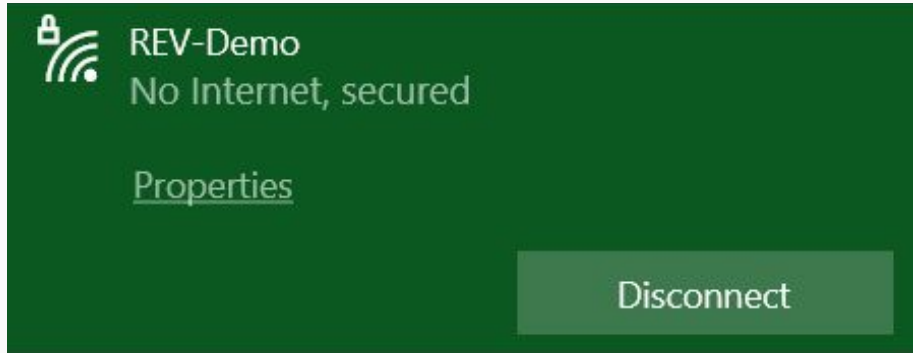
If you are unable to connect to the Control Hub's network after switching to the 5 GHz band, you can perform a Wi-Fi factory reset by holding down the Control Hub's button while you turn it on, until you see a rapid sequence of color changes on the Control Hub's light. The Wi-Fi network name and password will be reset to their default values, and the Wi-Fi band will be set to 2.4 GHz.

Scan For Devices
Don't see your device?

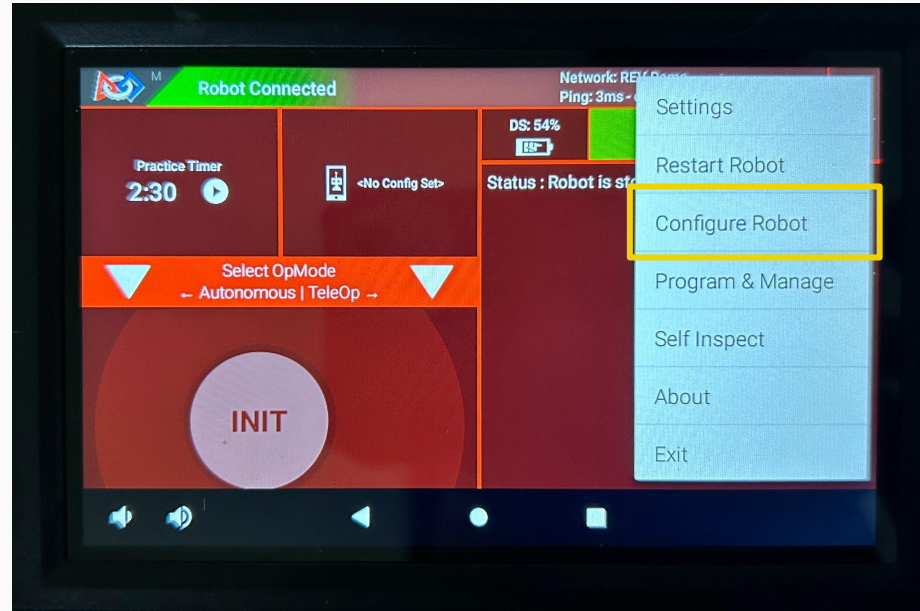
Download Robot Controller Logs
Examination of activity logs from the robot controller can sometimes help diagnose problems and bugs.

Report an Issue

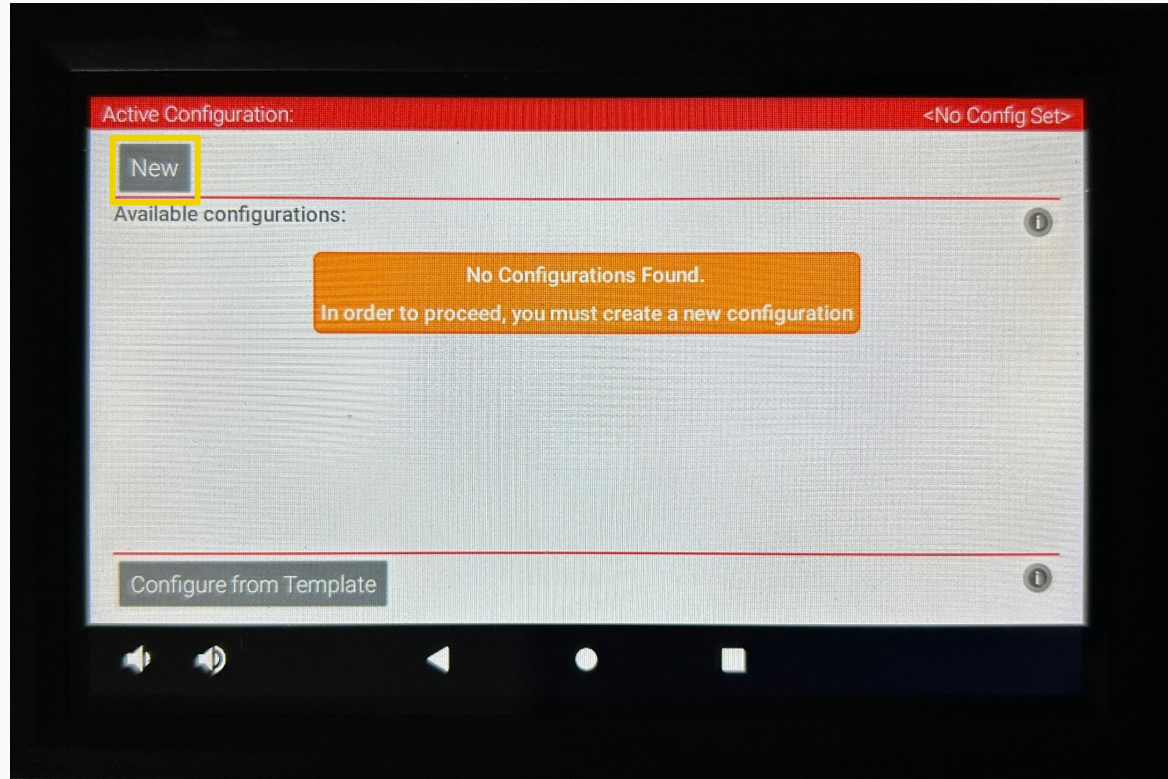
Step 9: Connect to your Control Hub's WiFi on your computer and Driver Hub using the credentials you just finished setting up. Make sure to connect to the Control Hub with the correct name.



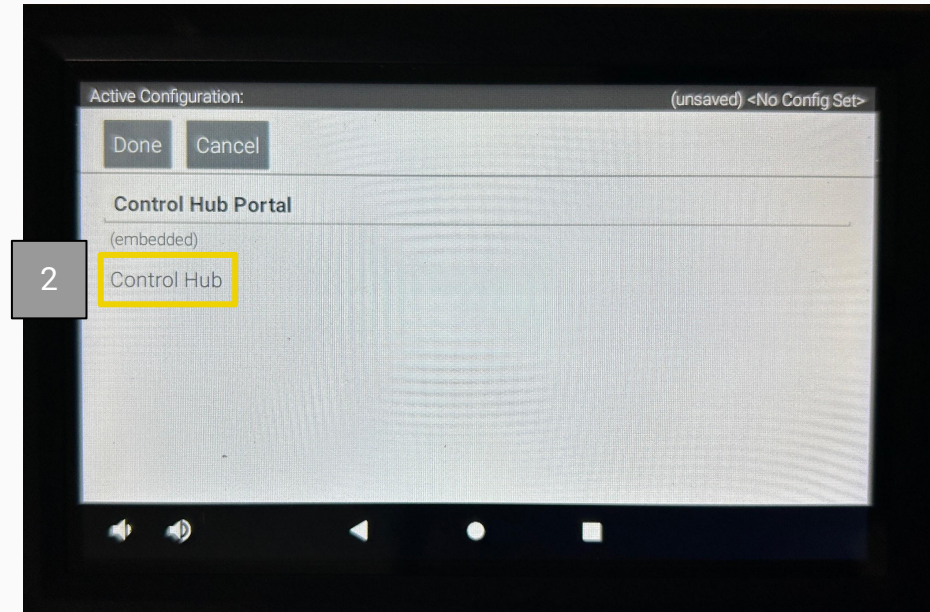
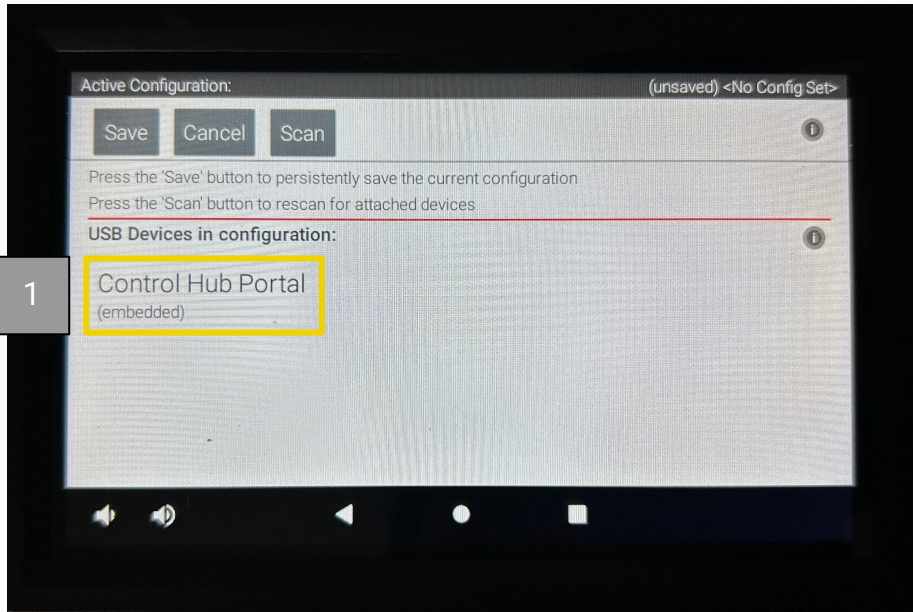
Step 10: On your Driver Hub, click the three dots in upper right-hand corner and then select “Configure Robot”.



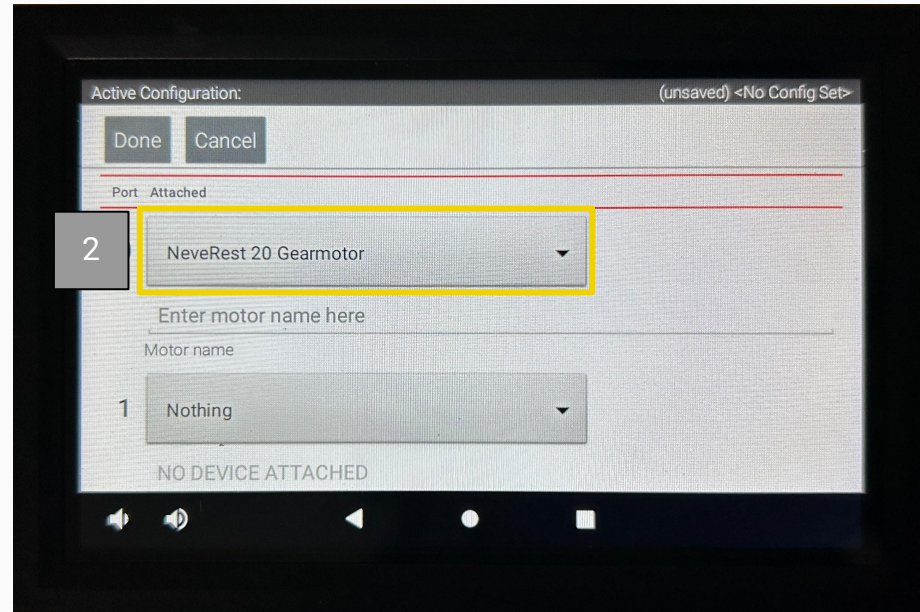
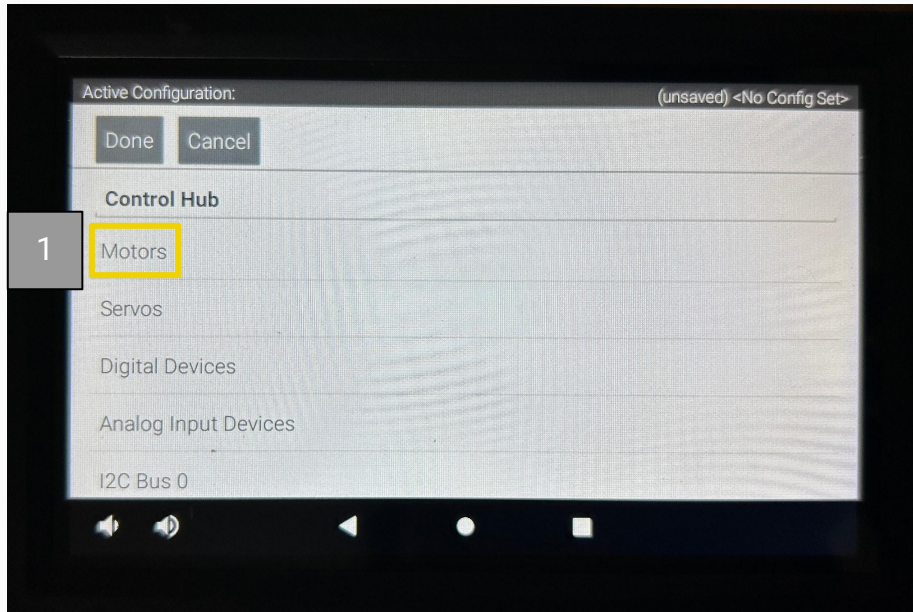
Step 11: Click the “New” button to make a new configuration.



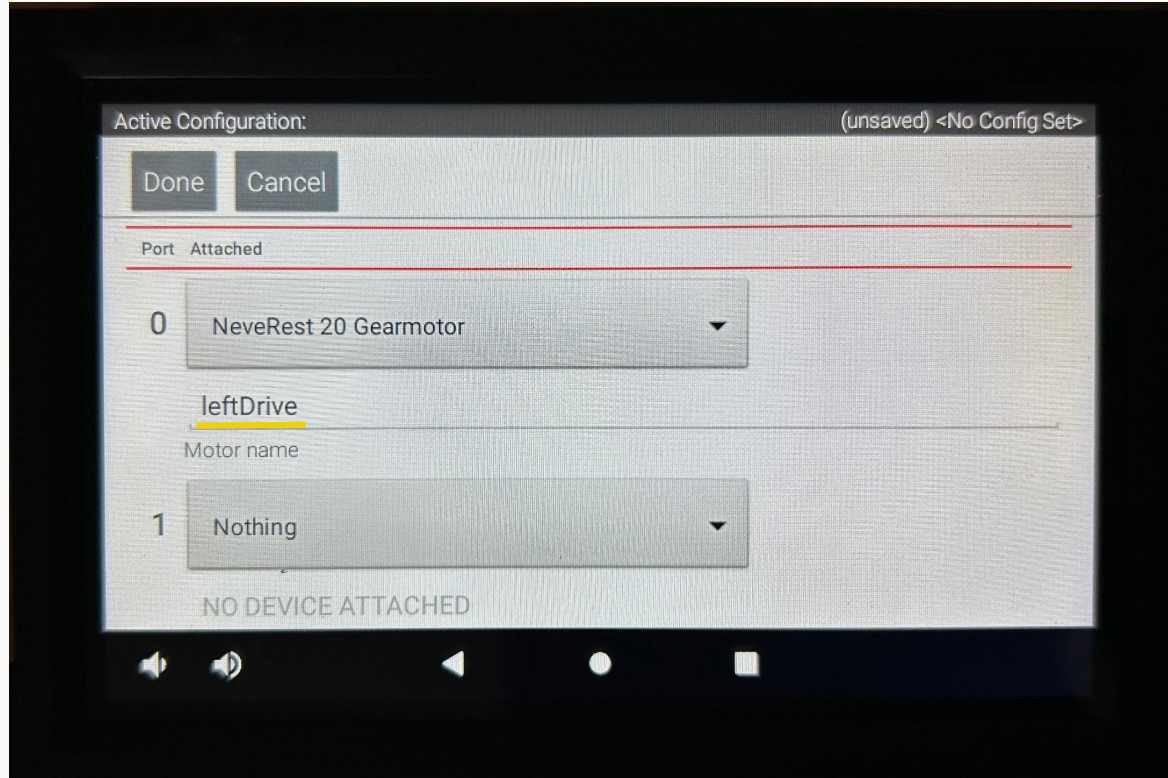
Step 12: Navigate into the Control Hub by clicking “Control Hub Portal,” followed by “Control Hub.”



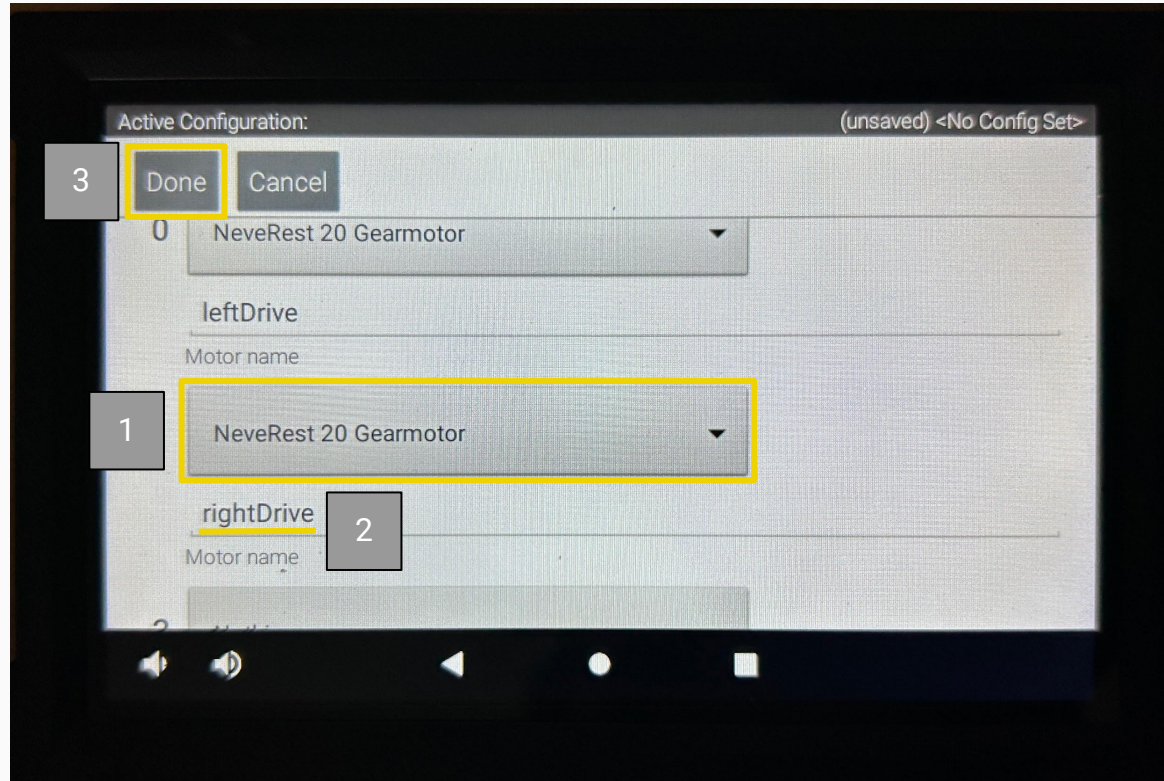
Step 13: Navigate into "Motors" and choose "NeveRest 20 Gearmotor" from the dropdown menu for Port 0.



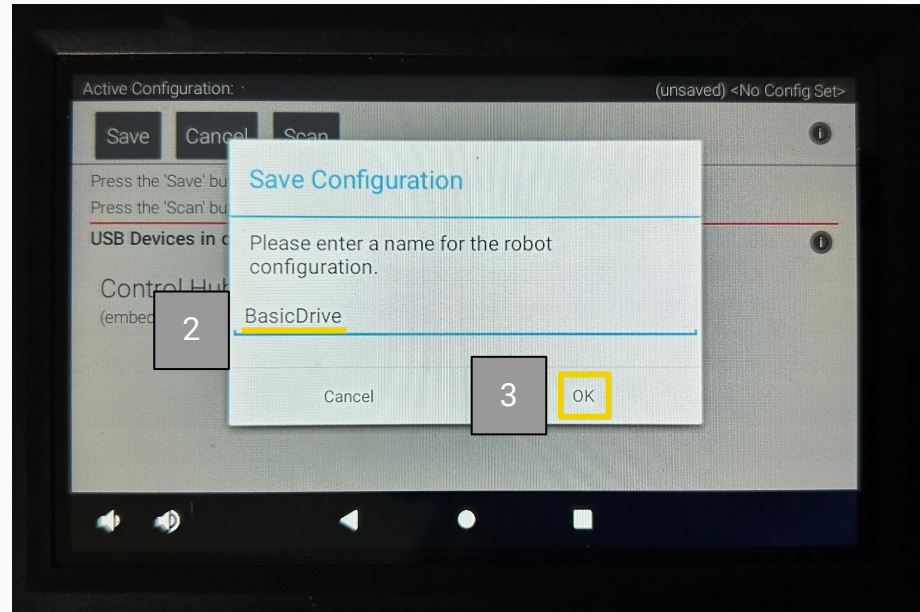
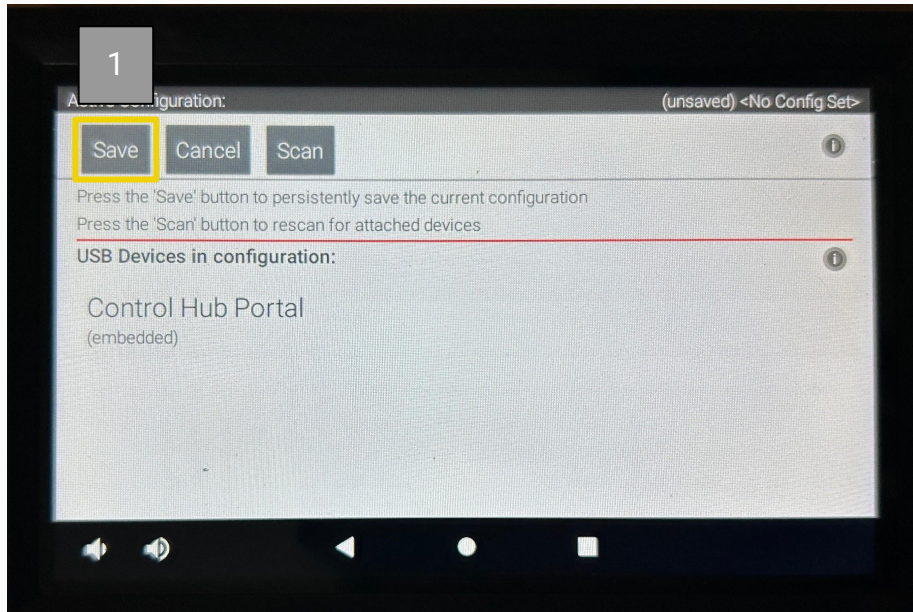
Step 14: Name Port 0 “leftDrive,” since this motor will be used for the left side of the drivetrain.



Step 15: Repeat steps 13 and 14 for Port 1, but make sure to name this motor "rightDrive" instead. Once you've done this, click "Done".



Step 16: Navigate back to the screen below by repeatedly clicking “Done”. Then click “Save” and name this configuration “BasicDrive” to save this configuration.



If done correctly, the Driver Hub's main screen will show BasicDrive as the active configuration. Make sure to check that this is the case.



That's it!

Your electronics are completely set up! However, if you try to test your robot using your Driver Hub and controller, nothing will happen. This is because your robot lacks programming. Follow the REV Electronics Programming Guide to create a basic tank drive program for your robot.