

Updating Firmware

Updating the Expansion Hub Firmware

The Control Hub has its own built-in REV Robotics Expansion Hub board. The purpose of the Expansion Hub board is to facilitate communication between the Control Hub's Android controller and the motors, servos, and sensors of the robot. Periodically, REV Robotics will release new versions of the firmware which contains fixes and improvements for the Expansion Hub. The firmware releases are in the form of a binary (".bin") file.

There are two boards within the Control Hub: an Expansion Hub and an Android controller. The Expansion Hub board built into the Control Hub, facilitates a line of communication between the built in Robot Controller and the motors, servos, and sensors. In order to improve the quality of the Hubs, REV Robotics will release firmware updates for the Expansion Hub. When a firmware release occurs, both Control Hub and Expansion Hub users will need to update their Expansion Hub firmware to the newest version.

You can use the *Manage* interface to upload the firmware file to the Control Hub. You can then use a Driver Station that is connected to the Control Hub to initiate the firmware update. You can download the latest firmware below.

Download the Latest REV Hub Firmware - Version 1.08.02

Updating the Expansion Hub Firmware

1. On the *Manage* page of the Control Hub user interface, press the *Select Firmware* button to to select the firmware file that you would like to upload.



An *Upload* button should appear after you successfully selected a file.

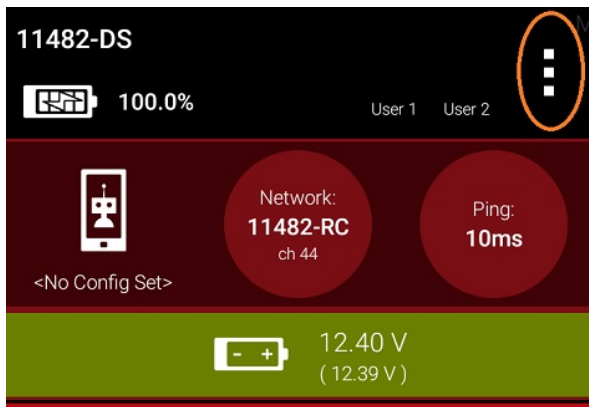


2. Press the *Upload* button to upload the firmware file from your computer to the Control Hub.

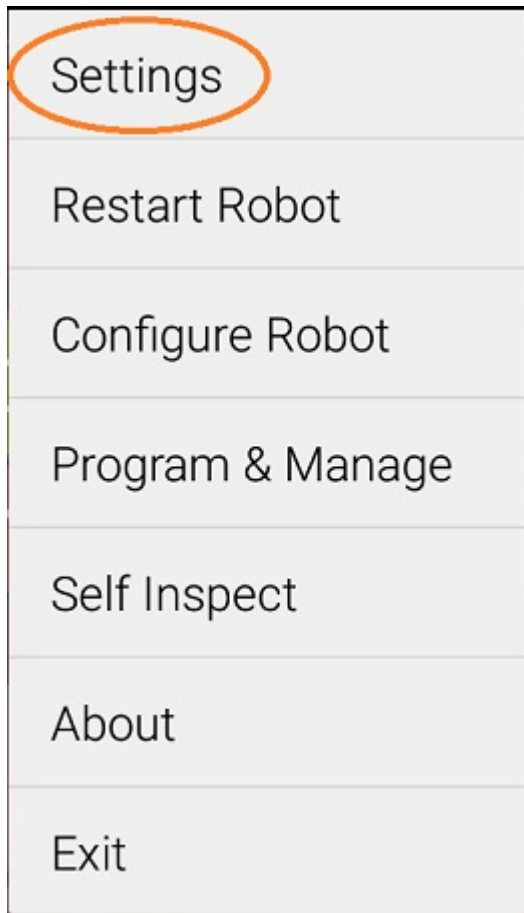


The words "Firmware upload complete" should appear once the file has been uploaded successfully.

3. On the Driver Station, touch the three dots in the upper right hand corner to display a pop-up menu.



4. Select *Settings* from the pop-up menu to display the Settings activity.



5. On the Driver Station, scroll down and select the *Advanced Settings* item (under the *ROBOT CONTROLLER SETTINGS* category).

ROBOT CONTROLLER SETTINGS

Robot Controller Name

Change the name of the robot controller

Robot Controller Color Scheme

Change the color scheme of the robot controller.
Note: the app will restart if the color scheme is changed

Sound

Turn robot controller app sounds on or off

OFF

Advanced Settings

Change advanced settings of the robot controller

GAMEPADS

Gamepad #1 Type

Logitech F310 Gamepad

Gamepad #2 Type

Logitech F310 Gamepad

LOGGING

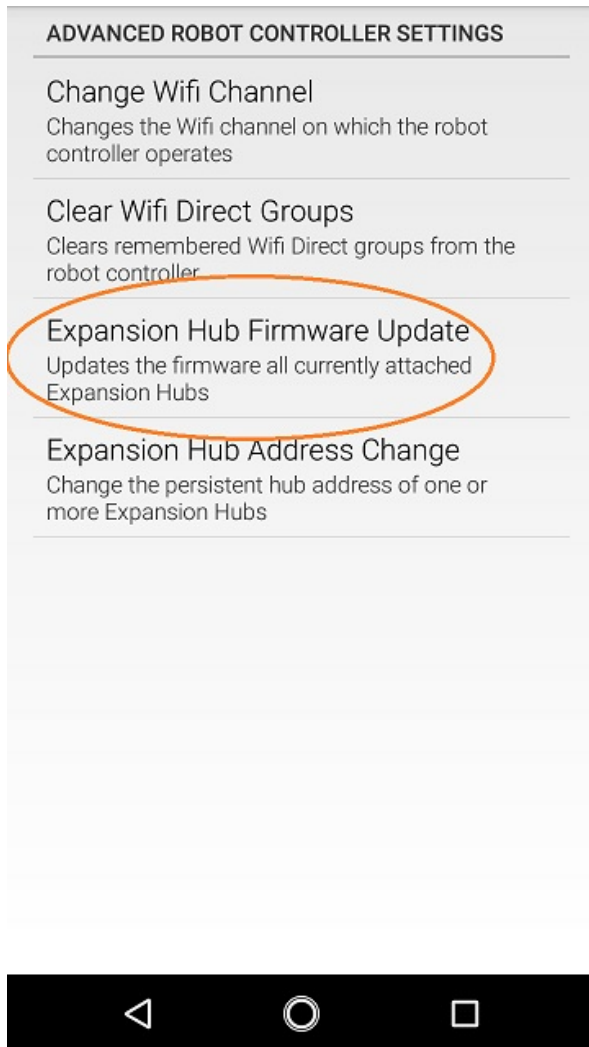
Match Logging

Adds the ability to specify match numbers and store per-

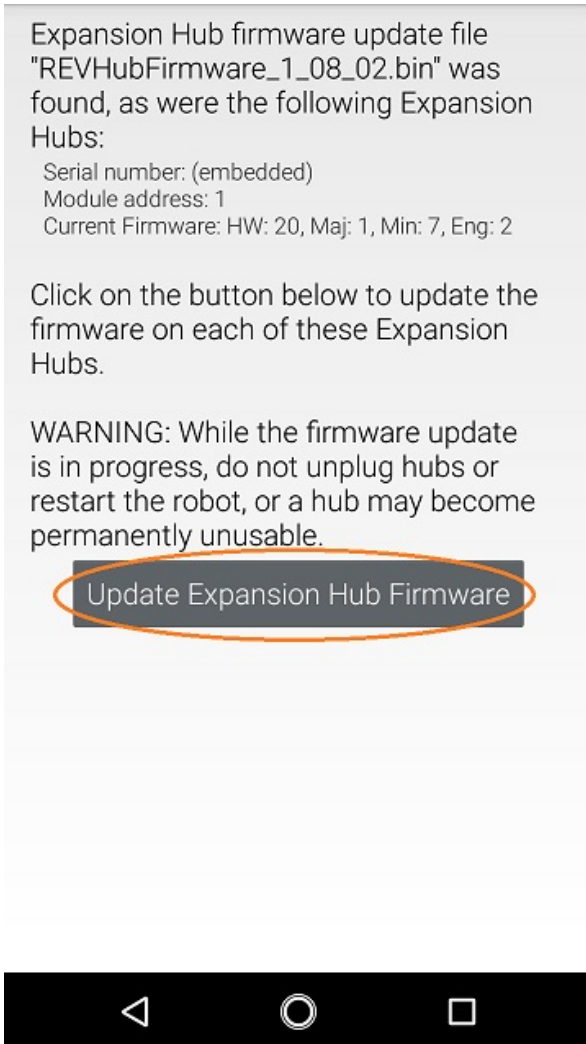
OFF



6. Select the *Expansion Hub Firmware Update* item on the *ADVANCED ROBOT CONTROLLER SETTINGS* activity.



7. If a firmware file that is different from the version currently installed on the Expansion Hub was successfully uploaded, the Driver Station should display some information about the current firmware version and the new firmware version. Press the *Update Expansion Hub Firmware* button to start the update process.



8. A progress bar will display while the firmware is being updated. Do not power off the Control Hub/Expansion Hub during this process. The Driver Station will display a message when the update process is complete.

