<u>**Brain and Cortex Installation Tips and Tricks**</u>

Here are a few tips and tricks to get RiQ up and running!

Installation Problems

1. Installation Error "Unpublished or unrecognized software package containing multiple .exe files"

Solution
Some security systems will identify Cortex as a security threat. To avoid this problem, temporarily disable your virus and/or firewall security systems during install.

2. **Network Firewall Blocking Compiling or Leading to Incomplete Installation**

- **Background**
  The Cortex uses "cloud based compiling" which means it needs to send the code out to a remote server for compiling, then returns it to your machine for downloading to the Brain.

- **Solution**
  If your are unable to install Cortex on a school or network computer, or having trouble compiling your Cortex program, you should contact the network administrator to whitelist the following addresses:

  173.255.220.209 edventures.com (downloads)
  74.207.244.219 edventureslab.com (downloads)
  173.255.220.209:5000/ (compiler)

  <u>Please note</u>, you may need to reinstall your Cortex software since the firewall may have prevented the proper installation of drivers.

Still having problems?
   If disabling the virus and firewall software does not fix the solution, you can test the installation and compiling problem using a different internet source.

   Connect the Brain and Cortex to a network outside of the school security system such as a wifi hotspot from a cell phone or on a home network. Try to reinstall and compile on these networks which will have less security than the school system. If you can you need to repeat steps 1 and 2 and make sure all virus and firewall programs are inactivated during installation.

3. **Error: While compiling, Cortex sends "Upload Failed" notification.**

- **Solution**
  This Error results in missing drivers from improper installation of Cortex. Uninstall Cortex entirely and reinstall it as described in steps 1 and 2.

4**. Problem: Insufficient power to execute program.**

- *Solution:*
  The Brain lights up when powered by the USB, but if not connected to a power source the battery may have insufficient power to drive a motor or operate a sensor.

- If a Cortex program is compiled successfully, the most likely issue is insufficient power in the system because the battery is low. To test the available power, charge the battery and try connecting Brain directly to the DC adapter to test.

- If the Cortex program still will not execute, check to make sure the power switch on Brain is turned to on (the Brain lights up when powered by the USB, but if the power switch is in the off position the motor driver board is not powered).

5. **Problem: Unable to execute program due to poor connection with charger or motor cable.**

- *Solution*
  Make sure to check that the power cord or motor cable is pushed all the way into the motor port in the Brain.

- If you can hear the motor spinning but there is no movement it means that the motor gearbox is in the incorrect position. The gearbox must be firmly pushed into position on the motor and the user should feel/hear a slight click as it engages.

6. Problem: Computer cannot find the Brain

Solution:
  1. If using USB connection, make sure the Bluetooth dongle and the USB are not plugged in at the same time. One plugged in or the other, that's the rule.

  2. Click on the connections status icon in Cortex to update the status or compile a program to re-establish connection.

  3. Make sure The Brain is switched "on" and plugged into a charged battery.

  3. If 1 and 2 do not work, shut the program down and reopen it.

-OR-

1. If using a bluetooth connection, make sure that the the device is "Connected" and not just "Paired" to the device. "Paired" means that the devices WILL "Connect" when they are within range, but they might not be completely "Connected" right away.

-OR-

1. If using USB connection, sometimes the SerialBridge.dll will get flagged by various anti virus software, which prevents it from being loaded. Download the Microsoft Visual C++ 2010 SP1 Redistributable Package (x86): https://www.microsoft.com/en-us/download/details.aspx?id=8328

7. Problem connecting the Brain to iOS device using Bluetooth

Solution:

1. Remove the BLE dongle from The Brain and note the number on the back of the dongle. Reinsert the BLE dongle.
2. Launch the Cortex and login with your user information
3. Click on the status tab icon to open the status bar window at the bottom of your screen.
4. Click on the BLE icon in the lower left hand corner of the status window.
5. Select the correct number, e.g. PCS-BLE-007, from the list of displayed dongles. This number needs to the match the number you noted in step number 1.

Your status window should update and show "linked" as the new status. You are connected and ready to program!!

8. Compilation stuck at 0%

Solution:

● This happens sometimes when "Compile" is pressed before the status bar shows that the Cortex is "Connected To Brain". Always make sure the the status icon shows the check mark indicating that the two are completely connected before attempting to compile your program.

9. Status Bar tab not accessible

Solution:

- Sometimes when Cortex is opened, it opens in a window that is a little too low for the screen, which hides the status bar tab. Click the maximize window button to enter fullscreen and bring the tab into view.

10. **How do I get Cortex on my Android device Solution**

- Use the Play store which comes with your device by default. Open the store app and search "pcs cortex". The first result should be a green icon with the outline of a brain in white. Select and install.

11. **How do I keep up to date on updates for cortex in android?**

Background
By default, your device should be setup to update the app automatically. However, sometimes a user will change their password and forget to update it in their device which prevents the app from updating automatically.

- **Solution**
  If you are unsure, open the google play store. Search for "PCS Cortex". Select the icon and see if there is an update. If your password is no longer correct it will ask you to update it.

12. **How do I check what version of cortex I have?**

- **Solution**
  Open Cortex and prior to logging in to your normal username, click on the Cortex logo in the upper left hand corner. This will take you to a secret menu; by the logo you just clicked on is a full version number. It should be **5.0.9** for the most up to date (as of 4/13/2016).