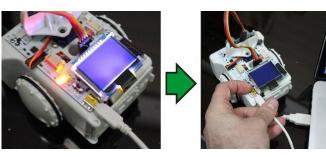
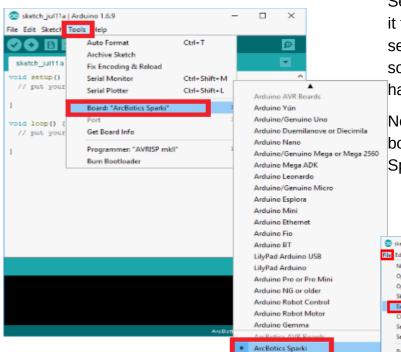
Sparki With Arduino, Guide #1 – Getting Started

The guides in this workshop are based on the Arcbotics Sparki online guides and edited by ArchReactor members for this workshop format. You can find more information about Sparki and more guides at arcbotics.com.



This guide will show you how to upload new code onto Sparki. You will use Arduino to upload code onto Sparki. You'll find the Arduino icon on the desktop, launch it now. If you have any questions at any point, please ask! Arch Reactor volunteers are here to help! There are no stupid questions, only stupid Reality TV shows!

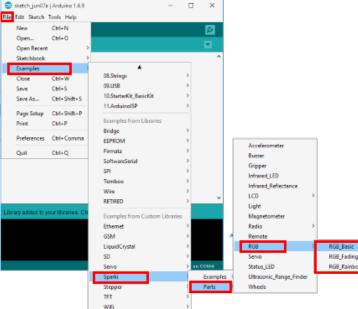
Plug Sparki's USB cable into your computer's USB port and Sparki as shown. This will power on the main board but not power the motors.



Select the Arcbotics Sparki board by selecting it from the Tools | Board menu. You need to select the Sparki board because the Arduino software can talk to a wide variety of hardware.

Next select the serial device of the Sparki board from the Tools | Serial Port menu. If the Sparki LED is still pulsing, wait for it to stop.

If you're not sure which Port is Sparki, try unplugging the Sparki, looking at the ports in the Serial Port menu, then plug in and look again after plugging in Sparki. The Port that shows up after you plugged in Sparki should be Sparki.



We will Start with the RGB examples. Pick any of the examples under RGB. (File \rightarrow Examples \rightarrow Sparki \rightarrow Parts \rightarrow RGB)

Hold the mouse over the up and down arrows on the menu to scroll.

The program selected should show up in the code box now. You can press the second button from the left (the left-pointing arrow, see image on the left). The code will first compile, then upload. If you just want to see if it compiles, click the Check button instead

While the code is being uploaded, Sparki's status light first pulses red, then blinks rapidly while the program is being sent. The console then lets you



know that it is done uploading and the Sparki reboots and runs the program. Note that you will get a warning about low memory, this is normal with the current version of the Sparki llibrary.

Sparki's RGB LED will blink, fade, or rainbow depending on which example you chose!

You may now try uploading a different RGB example, experiment with the example code, or move on to the motors guide.

