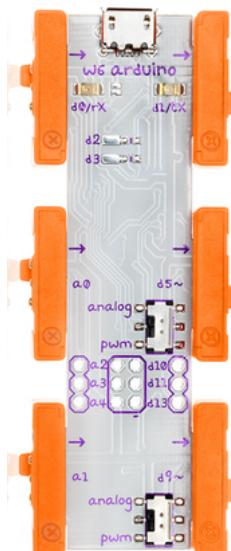




Arduino Bit

littleBits solves two common problems encountered when using an Arduino microcontroller:

1. **To build Arduino-powered inventions, you need to understand electronics and sometimes delicate components.** Using the Arduino littleBit eliminates the complexity of prototyping using electronic components and breadboards. You can program the littleBits Arduino to control any of the littleBits components or read data from the littleBits sensors.
2. **The programming language (Arduino C) is difficult for beginner programmers.** You may use the Arduino littleBit with the standard Arduino IDE (Integrated Development Environment) and program it the same way as any other Arduino. However, to make programming simpler, there is currently a beta version that makes Scratch talk to the Arduino littleBit. Follow the directions below to try it out! (*Remember, this is beta, meaning it may be rough around the edges.*)



Arduino Bit Tips - Use the Arduino with standard Arduino C code (sketches)

- * Go to littlebits.cc/bits/arduino and click on Forums link.
- * This will take you to the “Getting Started with Arduino” page. **Be sure to follow all the directions.** You **must** install the IDE and get it talking to the Arduino or nothing will work.
- * Find sample sketches (code) at littlebits.cc/arduino-sketches
- * You may also use the files found under the Arduino IDE File:Examples menu.
- * The links to download sketches are on the right side of these pages under “Additional Files”
- * *The first “blink” sketch has a bug - you must change all the pin 13 references to pin 1, 5, or 9 depending on which output port you choose (the right side of the Arduino littleBit).*

Arduino Scratch Setup Tips

- * Open a browser window to Scratch (scratch.mit.edu) and click on **Create**
- * Be sure the Arduino IDE is installed correctly, the correct board and port are selected, and you have successfully uploaded at least one sketch to the littleBits Arduino. (See steps above.)
- * Now you are ready to connect Scratch to the Arduino littleBit. Navigate to bit.ly/littlebitsscratch and follow the steps.
- * If your browser doesn't download the littleBits Scratch extension (the .ino file in step 5), copy ALL the text on the page and paste it into a new sketch in your Arduino IDE. Save the sketch.
- * When you see the green dot in Scratch panel “More blocks”, you can use the black littleBits blocks in any Scratch program, or use littleBits to control Scratch sprites.
- * If the dot is yellow, try restarting the browser, turning the power off and on to the Arduino littleBit, restarting the Arduino IDE and reloading the Scratch extension sketch to the Arduino.

