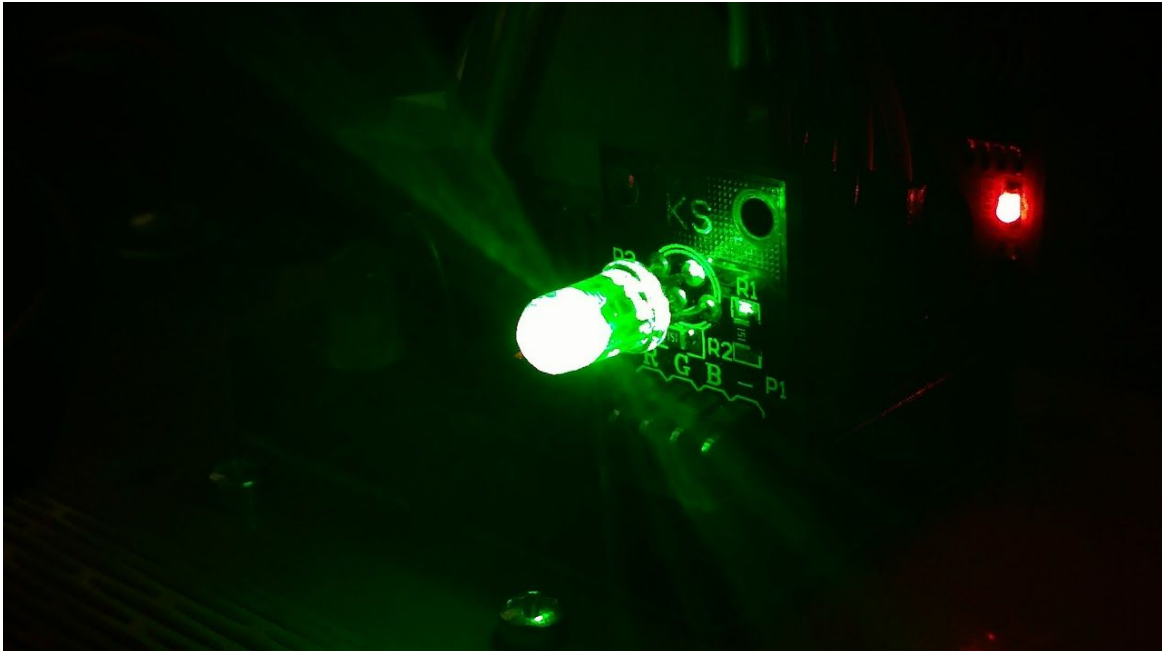


Adding a Status LED



Parts Required:

- 1 - Assembled Make-A-Pede
- 1 - RGB LED Breakout Board (common cathode)
- 4 - M-F Jumper Wires

OR

- 1 - Assembled Make-A-Pede
- 1 - RGB LED (common cathode)
- 3 - 150 Ω Resistors
- 4 - M-F Jumper Wires

OR

- 1 - Assembled Make-A-Pede
- 1 - Red LED
- 1 - Green LED
- 1 - Blue LED
- 3 - 150 Ω Resistors
- 2 - M-M Jumper Wires
- 4 - M-F Jumper Wires

Wiring

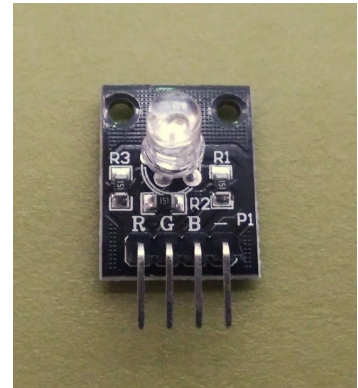
If you are using a breakout board, connect it to your Make-A-Pede according to the table below:

GND → G pin, port 10

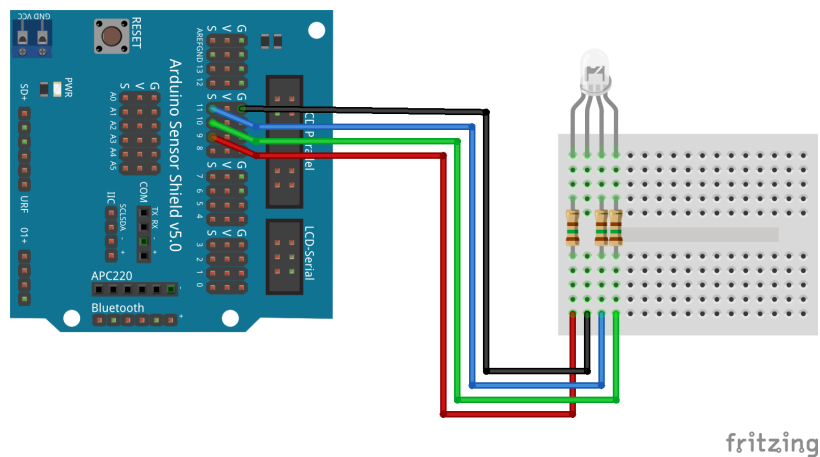
R \rightarrow S pin, port 9

$G \rightarrow S$ pin, port 10

B \rightarrow S pin, port 11

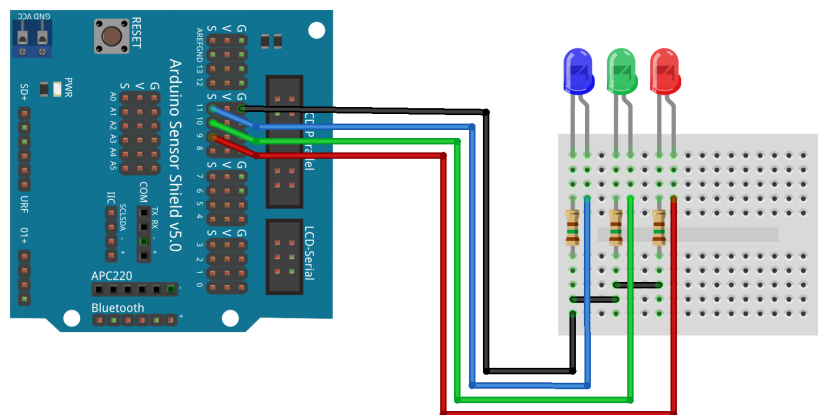


If you are using an RGB LED, connect it to your Make-A-Pede as shown below:



fritzing

If you are using three LEDs, connect them to your Make-A-Pede as shown below:



fritzing

Testing

Plug your Arduino into your computer. Open the StatusLEDDemo.ino program by opening the Arduino IDE and going to File → Examples → Make-A-Pede → StatusLEDDemo. Load the program onto your Arduino.

Turn on the Make-A-Pede and trigger one of the antenna sensors to start the program. The LED will cycle through the 7 available colors.

Programming

There are two commands available in the Make-A-Pede library to control the LED:

`setupRGB(redPin, greenPin, bluePin);`

setupRGB is used to set which pins will be used to control the LED.

Default values are 9, 10, and 11.

`setRGBColor(color, brightness);`

setRGBColor is used to set the LED to a specific color. Valid color inputs are:

0 or LED_OFF - Off
1 or LED_RED - Red
2 or LED_YELLOW - Yellow
3 or LED_GREEN - Green
4 or LED_CYAN - Cyan
5 or LED_BLUE - Blue
6 or LED_MAGENTA - Magenta
7 or LED_WHITE - White

The default color value is 0. Valid brightness inputs are 0-255 and can only be used if the LED is connected to PWM pins.