

# ENV-**RGB** To Color Display



//This code will take the output of the ENV-**RGB** and show you what it sees by applying that **RGB** color to //the background of a 400X400 window. This code is to be compiled using the processing IDE. It can be //downloaded here: <http://processing.org/download/>. This code was written in processing V1.5.1 //connect the ENV-**RGB** to a usb to serial converter. //You may have to modify this code to get it operational on your system. //Atlas Scientific does not offer support for this sample code.

```
import processing.serial.*;           //enable the serial port
Serial myPort;                       //set the serial port to "myPort"

int redValue = 0;                    //red value
int greenValue = 0;                  //green value
int blueValue = 0;                   //blue value

void setup()                          //set the screen size
{
  size(400, 400);                    //show what ports are on the computer
  println(Serial.list());            //select port 1. YOU MAY HAVE TO CHANGE
  myPort = new Serial(this, Serial.list()[1], 38400); //THIS FOR YOUR COMPUTER.
}

void draw() {background(redValue, greenValue, blueValue);} //set the background color
//with the color values

void serialEvent(Serial myPort) {
  String inString = myPort.readStringUntil('\r'); //get the ASCII string
  if(inString != null) { //read the string until <CR>
    inString = trim(inString); //if we see a string
    //trim off any whitespace
    int[] colors = int(split(inString, ",")); //split the string on the commas and convert
    // the resulting substrings into an integer array.

    if(colors.length >=3){ //if the array has at least three elements, you know you got
      // the whole thing. Put the numbers in the color variables
      redValue = colors[0]; //set R
      greenValue = colors[1]; //set G
      blueValue = colors[2]; //set B
      println(inString); //print out what we have
    }
  }
}
```