Referencia: <https://forum.arduino.cc/t/configurable-processing-dashboard/164711>

I've slowly started working on a configurable dashboard in Processing for displaying serial data. The idea is to create display objects like dial and bar gauges, graphs, g-force plots etc that can be quickly set up to display data coming in on the serial port. I thought I would post my progress as I go so that I can get feedback, suggestions and requests. So far it's a very rough start that can read ‘n’ bytes from the serial port (expects n bytes but also delimited with a 0 to re sync if there's an interruption) and send each byte to a dial gauge or bar graph object (more objects to come).

To start the objects have an ‘x’ & ‘y’ position and a size as well as a data range which is split into 10 increments and a label. The Processing code and the Arduino code are included, connect 3 pots to A0, A1, A2 and run (you will probably have to check that Processing is using the correct com port). Play around to see how everything works. Please excuse the lack of commenting and the somewhat disjointed structure it was a quick hack to display something that I've decided to take further.

Hope someone finds this useful

Regards

Andrew

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Reads an analog input on pin 0,1,2, maps it to 1-255 and writes it to the serial port.

Attach the center pin of a potentiometer to pin A0, and the outside pins to +5V and ground. Same for A1 and A2.

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int in [] = {0,0,0,0};

void setup() {

  Serial.begin(57600); // Initialize serial communication at 57600 bits per second

}

void loop() {

for (int i = 0 ; i < 3 ; i ++) // Read the input on analog pin 0-2

{

in [i] = analogRead(i);

in [i] = map(in [i], 0, 1023, 1, 255);

delay (10);

}

Serial.write(0); // De limits the packet, tells Processing where the data packet starts

delay(1);

for (int i = 0 ; i < 3 ; i ++) // Writes the array to the serial port

{

Serial.write(in[i]);

delay(1); // Delay in between writes for stability

}

Serial.write(in[1]); // Processing code is expecting 4 bytes so this is just a dummy for now

}