

MASTER:

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#include <Adafruit_NeoPixel.h>
#define PIN 6

#include <SoftwareSerial.h>
SoftwareSerial BTserial(10, 11);
// Parameter 1 = number of pixels in strip
// Parameter 2 = pin number (most are valid)
// Parameter 3 = pixel type flags, add together as needed:
// NEO_KHZ800 800 KHz bitstream (most NeoPixel products w/WS2812
LEDs)
// NEO_KHZ400 400 KHz (classic 'v1' (not v2) FLORA pixels, WS2811 drivers)
// NEO_GRB Pixels are wired for GRB bitstream (most NeoPixel products)
// NEO_RGB Pixels are wired for RGB bitstream (v1 FLORA pixels, not v2)
Adafruit_NeoPixel strip = Adafruit_NeoPixel(16, PIN, NEO_GRB + NEO_KHZ800);

int pirState = LOW; // we start, assuming no motion detected
int val = 0;
int stateone = 0;
int statetwo = 0;
int statetre = 0;

void setup() {
  pinMode(A4, INPUT);
  pinMode(A3, INPUT);
  pinMode(A2, INPUT);
  pinMode(2, INPUT);
  pinMode(4, INPUT);
  pinMode(7, INPUT);
  Serial.begin(9600);
  BTserial.begin(38400);
  strip.begin();
  strip.setBrightness(30); //adjust brightness here
  strip.show(); // Initialize all pixels to 'off'
}

void loop() {
  int round1 = map(analogRead(A4), 0, 500, 0, 500);
  int round2 = map(analogRead(A3), 0, 500, 0, 500);
  int round3 = map(analogRead(A2), 0, 500, 0, 500);
  if (round1 > 500) {
    BTserial.write('a');
  }
  if (round2 > 500) {
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    BTserial.write('a');
}
if (round3 > 500) {
    BTserial.write('a');
}
int Button1 = digitalRead(2);
int Button2 = digitalRead(4);
int Button3 = digitalRead(7);
Serial.print(round1);
Serial.print( " ---- " );
Serial.print( round2);
Serial.print( " ---- " );
Serial.println(round3);
BTserial.write('0');
if (Button1 == HIGH){
    BTserial.write('1');
    stateone = 1;
    statetwo = 0;
    statetre = 0;
}
else if (Button2 == HIGH){
    BTserial.write('2');
    stateone = 0;
    statetwo = 1;
    statetre = 0;
}
else if (Button3 == HIGH){
    BTserial.write('3');
    stateone = 0;
    statetwo = 0;
    statetre = 1;
}
}

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if (stateone == 1) {
    state1();
}
if (statetwo == 1) {
    state2();
}
if (statetre == 1) {
    state3();
}
}

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void state1() {

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int round1 = map(analogRead(A4), 0, 500, 0, 100);
int round2 = map(analogRead(A3), 0, 500, 0, 100);
int round3 = map(analogRead(A2), 0, 500, 0, 100);
  strip.setBrightness(20 + round3);

for(int i=0; i<strip.numPixels(); i++) {
  strip.setPixelColor(i , strip.Color(100, 0, 0)); // Draw new pixel
  strip.show();
  delay(20);
}
}

void state2() {
  int round1 = map(analogRead(A4), 0, 500, 0, 100);
  int round2 = map(analogRead(A3), 0, 500, 0, 100);
  int round3 = map(analogRead(A2), 0, 500, 0, 100);
  strip.setBrightness(20 + round3);

  colorWipe(strip.Color(0, 100, 0), 20); // Green
}

void state3() {
  int round1 = map(analogRead(A4), 0, 500, 0, 100);
  int round2 = map(analogRead(A3), 0, 500, 0, 100);
  int round3 = map(analogRead(A2), 0, 500, 0, 100);
  strip.setBrightness(20 + round3);

  colorWipe(strip.Color(255, 255, 0), 20); // Yellow
}

void colorWipe(int c, int wait) {
  for(int i=0; i<strip.numPixels(); i++) {
    strip.setPixelColor(i, c);
    strip.show();
    delay(wait);
  }
}
}

```