

This pad builds on [[9Bn87r74CA/rev.0]], created by

This pad builds on [[hacklab-scanlineanimator/rev.6]], created by [unnamed author] & rambo

```
#include "FastLED.h"
// How many leds in your strip?
#define NUM_LEDS 60
// For led chips like Neopixels, which have a data line, ground, and power, you just
// need to define DATA_PIN. For led chipsets that are SPI based (four wires - data, clock,
// ground, and power), like the LPD8806, define both DATA_PIN and CLOCK_PIN
#define DATA_PIN 11
#define CLOCK_PIN 10
// Define the array of leds
CRGB leds[NUM_LEDS];
CRGB c;
int start = 0;
void setup() {
    FastLED.addLeds<NEOPIXEL, DATA_PIN>(leds, NUM_LEDS);

}
void loop() {
    wave(0);
    wave(2);
    wave(2);
    wave(0);
    wave(3);
    wave(4);
    wave(20);
}
void wave(int additionalIntensity) {

    CRGB topColor = randomColor(150 + additionalIntensity, 50, 100, 20, 40, 40 + additionalIntensity * 2, 40);
    CRGB midColor = randomColor(145, 30, 160, 40, 90, 40);
    CRGB botColor = randomColor(135, 50, 200, 20, 30, 30);
    CRGB mid2Color = randomColor(125, 40, 160, 40, 40 + additionalIntensity, 30);
    int overallDelay = random8(0, 100) + additionalIntensity * 3;
    int botDelay = random8(30, 60) + overallDelay;
    int midDelay = random8(20, 40) + overallDelay;
    int topDelay = random8(5, 20) + overallDelay;
    int mid2Delay = random8(7, 30) + overallDelay;

    int steps = 64;
    int steps2 = 40;
    scrollSection(botDelay, steps, botColor);
    scrollSection(midDelay, steps, midColor);
    scrollSection(topDelay, steps, topColor);
    scrollSection(mid2Delay, steps, mid2Color);
}
CRGB randomColor(int hue, int hueVar, int sat, int satVar, int val, int valVar) {
    int h = randomVar(hue, hueVar);
    int s = randomVar(sat, satVar);
    int v = randomVar(val, valVar);
    return CHSV(h, s, v);
```

```

}

int randomVar(int value, int variation) {
    //int result = value - variation / 2 + (random16(variation) + random16(variation)) / 2;
    int result = value - variation / 2 + random(variation);
    if (result <= 0) return 0;
    else if (result >= 255) return 255;
    else return result;
}

void scrollSection(int stepDelay, int steps, CRGB toColor) {
    CRGB fromColor = leds[0];
    CRGB color;

    int stepSize = 256 / steps;

    for(int i = 0; i <= 256; i += stepSize) {
        color.r = mix(i, fromColor.r, toColor.r);
        color.g = mix(i, fromColor.g, toColor.g);
        color.b = mix(i, fromColor.b, toColor.b);

        scrollPixel(color);
        FastLED.show();

        delay(stepDelay);
    }
}

uint8_t mix(uint16_t t, uint8_t from, uint8_t to) {
    return uint8_t( (((to * t) + ((256 - t) * from) ) >> 8) );
}

void scrollPixel(CRGB color) {

    for(int i = NUM_LEDS; i > 0; i--) {

        leds[i].r = leds[i - 1].r;
        leds[i].g = leds[i - 1].g;
        leds[i].b = leds[i - 1].b;
    }

    leds[0].r = color.r;
    leds[0].g = color.g;
    leds[0].b = color.b;
}

```