LED Strip Research Notes

Equipment

* LEMONBEST 16.4FT SMD 5050 Water-resistant 300LEDS RGB Flexible LED Strip Light Lamp Kit + 44Key IR Remote Controller- Purchased from Amazon
* Arduino Uno
* 12V power supply
* 9V battery
* 3 10K resistors
* 500mA transistor (2n7000)

Setup

* 9V or 12V on the white power wire.
* Red, Green, and Blue wires on PWM digital ports on the Arduino
* Resistor and Transistor between Arduino and LED strip

Tests

* We used digitalWrite to get Red, Green, or Blue
* Use digitalWrite to flash one of the colors
* Used analogWrite to mix colors and fade and flash white and yellow
* Used current meter to measure the current from the Arduino and full power

Conclusions

* Blue is extremely weak at 9V
* All colors were bright at 12V
* Full power current ranged from 750mA to 990mA
* 500mA transistor caused Arduino controlled lights to be dim

Color Recipes

* White-255 Red, 140 green, 150 blue
* Yellow-255 Red, 30 green