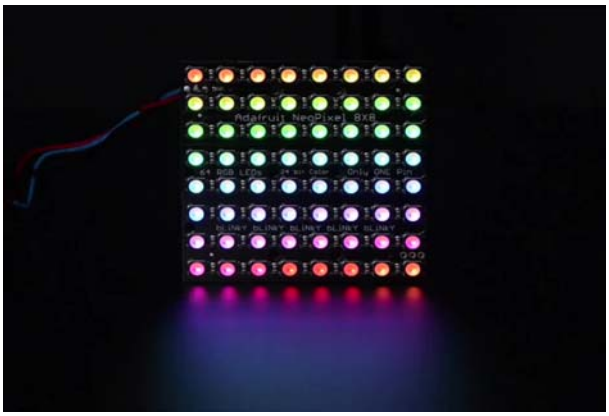
NeoPixel NeoMatrix - 64 RGBW - Warm White - ~3000K

PRODUCT ID: 2870



Description

Put on your sunglasses before wiring up this LED matrix - 64 eye-blistering RGBW LEDs adorn the NeoMatrix for a blast of configurable color *and* white. Arranged in an 8x8 matrix, each pixel is individually addressable. Only one microcontroller pin is required to control all the LEDs, and you get 24 bit color for each LED.

This is the Warm White RGBW version. We also have this NeoMatrix in Natural White, Cool White, and good ole RGB!

The NeoPixel is 'split', one half is the RGB you know and love, the other half is a white LED with a yellow phosphor. Unlit, it resembles an egg yolk. Lit up these are insanely bright (like ow my eye hurts) and can be controlled with 8-bit PWM per channel (8 x 4 channels = 32-bit color overall). Great for adding lots of colorful + white dots to your project!

Wiring it up is easy: there are two 3-pin connection ports. Solder wires to the input port and provide 5VDC to the +5V and ground pins, then connect the DIN pin to your microcontroller. If you're using our NeoPixel Arduino library, use digital #6. You'll also need to make a common ground from the 5V power supply to the microcontroller/Arduino. Since each LED can draw as much as 60mA (thats up to 3.5 Amps per panel if all LEDs are on bright white!) we suggest our 5V 2A power supply. For most uses, you'll see about 1-2A of current per panel.

If, say, you need MORE blinky, you can chain these together. For the second shield, connect the DIN connection to the first panel's DOUT. Also connect a ground pin together and power with 5V. There you go! You can chain as many as you'd like although after 4 or more panels you may run low on RAM if you're using an UNO. Watch your power usage too, you may need a 5V 10A power supply for so many of these!

There is a single data line with a very timing-specific protocol. Since the protocol is very sensitive to timing, it requires a real-time microconroller such as an AVR, Arduino, PIC, mbed, etc. It cannot be used with a Linux-based microcomputer or interpreted microcontroller such as the netduino or Basic Stamp. Our wonderfully-written Neopixel library for Arduino supports these pixels! As it requires hand-tuned assembly it is only for AVR cores but others may have ported this chip driver code so please google around. An 8MHz or faster processor is required.

Our detailed NeoPixel Uberguide has everything you need to use NeoPixels in any shape and size. Including ready-to-go library & example code for the Arduino UNO/Duemilanove/Diecimila, Flora/Micro/Leonardo, Trinket/Gemma, Arduino Due & Arduino Mega/ADK (all versions)

Technical Details

Details:

Dimensions: 71mm x 71mm x 3mm / 2.8" x 2.8" 0.1"

Weight: 24.21g