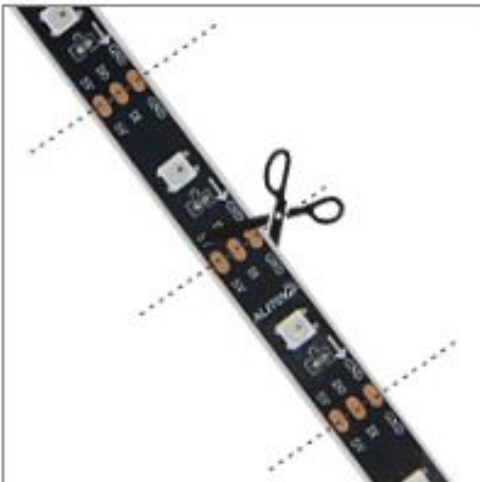


Background info:

- Model: AL-WS2812B-150BK-WP
- Light source: 5050 RGB LED
- LED Qty: 30pcs per meter
- The gray level: 256
- Color: full color (24-bit)
- Voltage: DC 5V
- Power: 9W/M
- **Waterproof: Waterproof IP67**
- Data transmitting speed is up to 800Kbps
- **RGB order: Green/Red/Blue (Please set up the controller before you use it.)**
- **Red wire: 5V+ / Black; Wire: GND or "--" ; White wire: Data "D"**
- **You must use a 5V DC power supply to power these strips, do not use higher than 6V or you can destroy the entire strip.**



Cut and weld freely

Each LED is an independent and complete circuit cell. It can be cut and welded at the cutting line to meet your requirements.



Flexible design

The flexible FPCB plate is used as the substrate. So WS2812B LED strip can be gently bent and curved around surfaces.



Chainable design

There are 3pin JST connectors on both ends. The LED strips can be hooked up one by one without soldering.



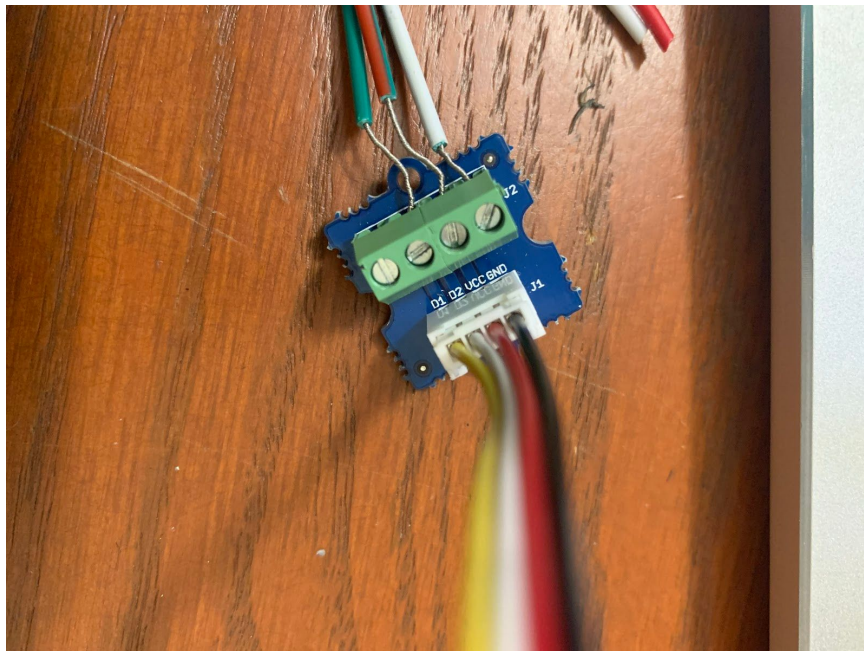
Waterproof IP67

Silicone waterproof sheathing covers the led strip. Waterproof grade reaches IP67. It can be used outdoor.

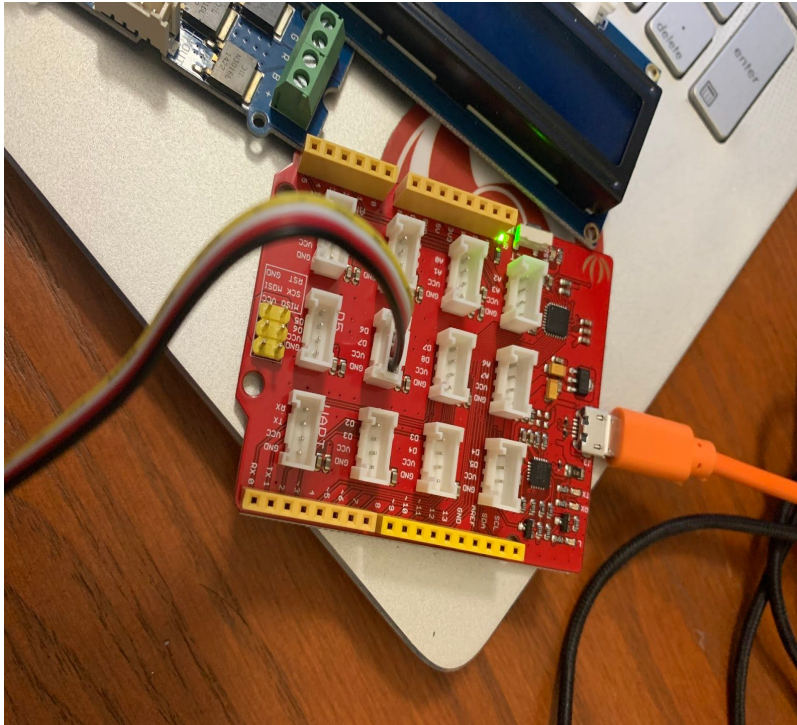
Connecting with groove:

No need for driver:

- $5V > VCC$
- $(-) > GND$
- $D1 > D1/D2$



Here red is 5v, white is (-), and green is D1



You can use any D(*) port on your board just note which actual digital pin interfaces with your connection

Programming:

- <https://github.com/FastLED/FastLED> ; download, unzip, and drag the FastLED folder to the "Library" subfolder within your Arduino folder (likely found on your desktop)

Super basic code:

- Beginning setup
- Most simple
 - leds[n] = CRGB (*, *, *);
 - FastLED.show();
 - * Denotes RGB values max 255 min 0
 - https://www.rapidtables.com/web/color/RGB_Color.html

```
#include <FastLED.h>
#define LED_PIN 7
#define NUM_LEDS 10
CRGB leds[NUM_LEDS];
void setup() {
  FastLED.addLeds<WS2812, LED_PIN, GRB>(leds, NUM_LEDS);
  pinMode(7, OUTPUT); // connected to S terminal of Relay
}
void loop()
```

```
{
leds[1] = CRGB ( 250, 0, 0);
FastLED.show();
delay(60);
leds[2] = CRGB ( 250, 50, 0);
FastLED.show();
delay(60);
leds[3] = CRGB ( 250, 100, 0);
FastLED.show();
delay(60);
leds[4] = CRGB ( 250, 150, 0);
FastLED.show();
delay(60);
leds[5] = CRGB ( 250, 200, 0);
FastLED.show();
delay(60);
leds[6] = CRGB ( 250, 250, 50);
FastLED.show();
delay(60);
leds[7] = CRGB ( 250, 250, 100);
FastLED.show();
delay(60);
leds[8] = CRGB ( 250, 250, 150);
FastLED.show();
delay(60);
leds[9] = CRGB ( 250, 250, 200);
FastLED.show();
delay(60);
leds[10] = CRGB ( 250, 250, 250);
FastLED.show();
delay(60);
}
```