# **SigmonLED**

IR User's Manual

for version 3.2

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#### Welcome

SigmonLED is an Arduino controller for WS2818 and similar programmable LED strips. The Arduino can be controlled over Bluetooth with compatible devices/software, or through an infrared remote.

This package should contain the following:

- Arduino Uno, preloaded with SigmonLED
- WS2818 LED strip
- 5V DC Power Adapter
- IR remote with receiver

WARNING: You should NOT plug the DC power adapter directly into the Arduino! Instead, plug the barrel jack into the plug coming from the LED strip.

This manual will teach you how to use the IR remote with your SigmonLED-powered Arduino.

### **Input Light**

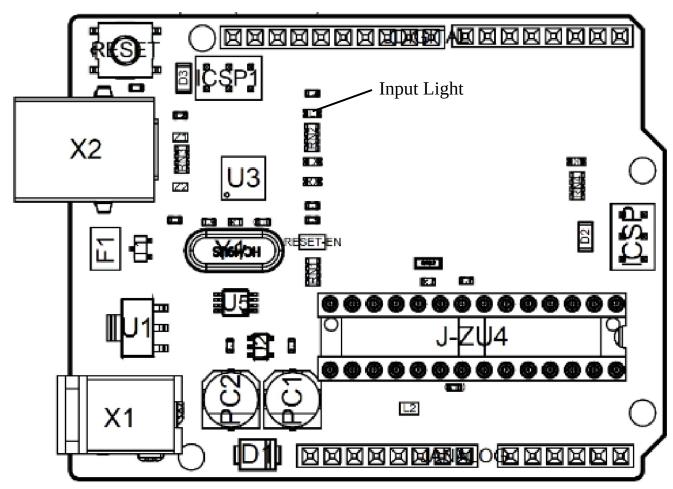


Figure 1: Arduino Uno

The input light is solid yellow if the last button press was misinterpreted. You may need to press the button again.

Blinking yellow indicates certain modes. See the section on **Palette Mode** for more information.

## **Color Mode**

This is the default mode when the Arduino is first powered on. The LEDs will remain dark.

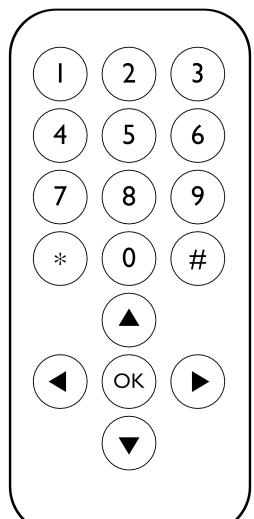


Figure 2: IR Remote

ОК	Turns LEDs on/off
<b>A</b>	Turn brightness up
▼	Turn brightness down
*	Switch to <b>Palette Mode</b>
#	Switch to <b>Select Mode</b>
Numbers	Select preset color

#### **Color Presets**

Color presets can be selected while in **Color Mode** by pressing a number on the remote. These presets can be changed by selecting the preset and then entering **Select Mode** by pressing #. Note that if the Arduino loses power, it will reset all presets back to default. Here is a list of the default presets:

1	Warm White
2	Red
3	Orange
4	Yellow
5	Green
6	Teal
7	Blue
8	Purple
9	Magenta
0	White

#### **Select Mode**

This selects a color for use in **Color Mode**. When the mode is first entered, the LEDs will flash a rainbow to indicate you are changing the *Hue* of the color. While in this mode, the LEDs will intermittently flash to indicate they are still in **Select Mode**.

#### **Changing Hue**

When you start changing the color hue, the LEDs will flash a rainbow, and then return to your currently selected hue. You can change the hue with  $\blacktriangle$  and  $\blacktriangledown$ . Pressing  $\blacktriangleright$  will select the *Saturation* of the color.

#### **Changing Saturation**

When you start changing the color saturation, the LEDs will flash a gradient of your current hue fading to white, and then return to your currently selected hue and saturation. You can change the saturation with ▲ and ▼. Pressing ◄ will go back and select the *Hue* of the color. Pressing ► or **OK** will finalize your selection and return to **Color Mode**.

## **Palette Mode**

This mode will scroll the entire LED strip through a selected color palette. You can customize the behavior of this using the number pad and arrow keys on the remote.

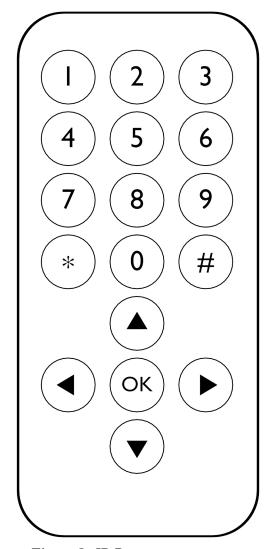


Figure 3: IR Remote

OK	Turns LEDs on/off
<b>A</b>	Increase current value
▼	Decrease current value
*	Switch to Color Mode
#	Toggle blending

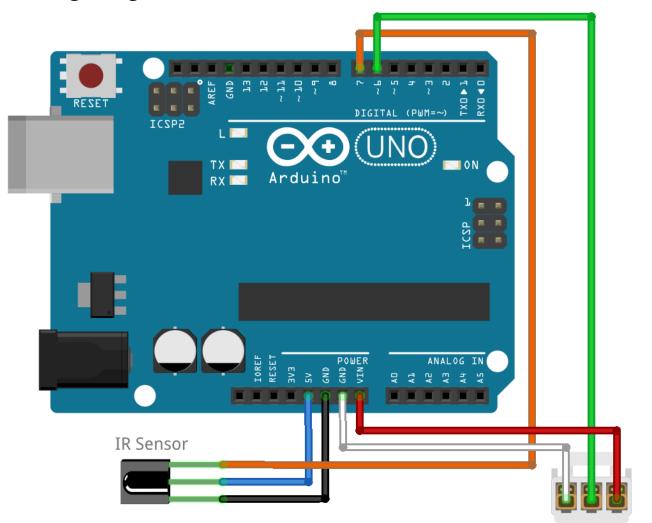
## **Value Types**

The **Number Pad** can change the current *value type* being modified by ▲ and ▼:

1	Brightness
2	Color Palette
3	Scroll Speed
4	Palette Distribution
5	Scroll Style

When **Palette Mode** is initially entered, the current value type will always be *Brightness*.

## **Wiring Diagram**



LED Strip Connector