

DIY RGB Mousepad



N7 Cat

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Summary

DIY RGB mousepad using WS2812B addressable LED strips and a microcontroller. It prints in two halves, you can use...

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DIY RGB mousepad using WS2812B addressable LED strips and a microcontroller.

It prints in two halves, you can use LePage Ultra Gel Control Super Glue to bond the two halves or just melt the joint together after aligning. I've also read that the brown gorilla glue might work too, its much cheaper than the super glue so worth a try.

You can use any microcontroller, ESP 32, ESP 8266 or Arduino. I've included the ino (saved as a txt file, just rename) for running on an arduino nano - it uses the popular FastLED.h library and runs the following states:

- STATE_BREATHE, (blue breathing)
- STATE_OCEAN, (ocean colour cycling)
- STATE_RAINBOW, (rainbow cycle)
- STATE_REACTIVE, (sound reactive - need a AGC mic for this)
- STATE_CYCLE, (mono cycle)
- STATE_WHITE (white)

BOM:

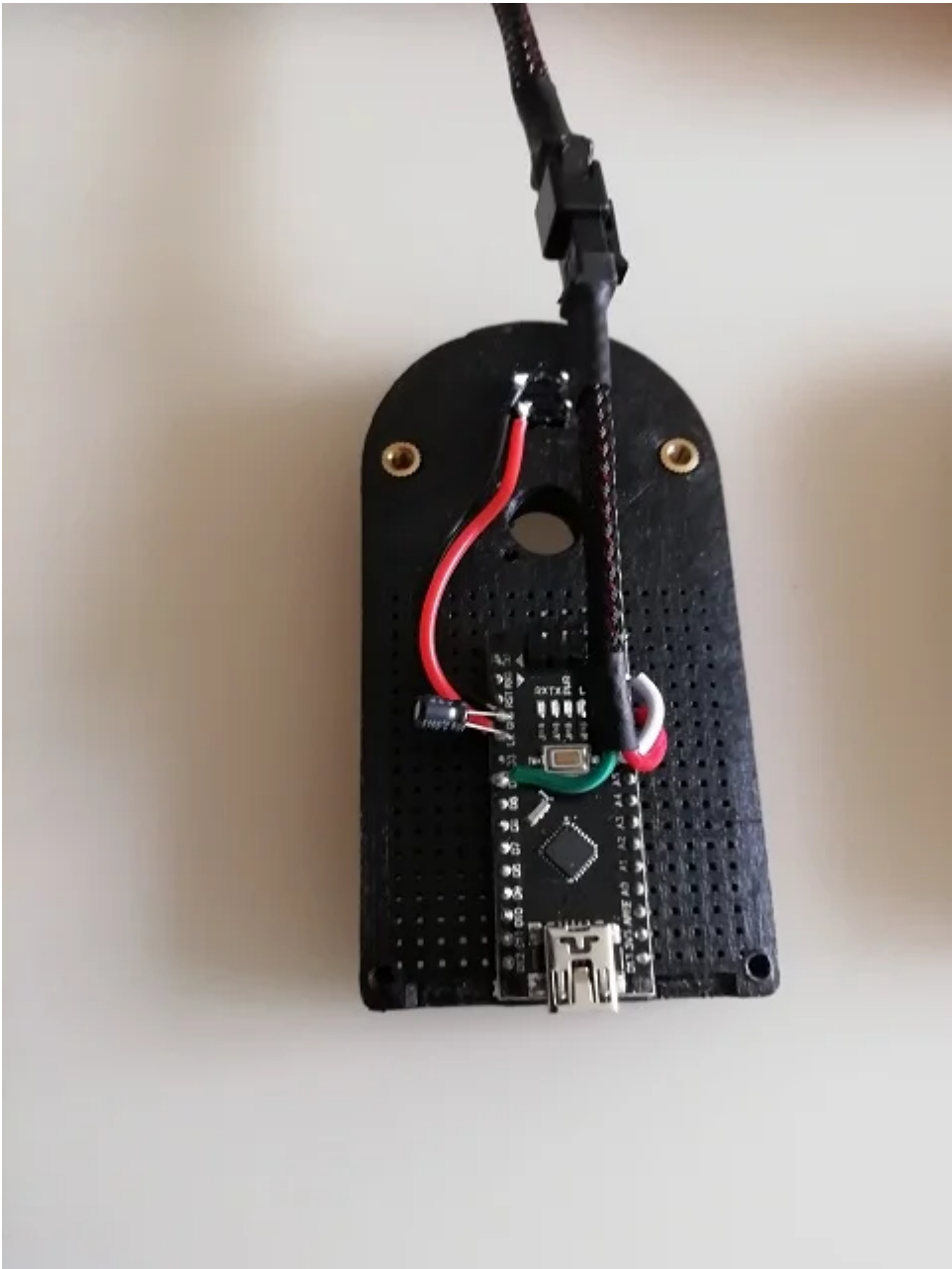
- WS2812B 60 led/m Black PCB IP30 strip (<https://www.aliexpress.com/item/32849686500.html>) - note they also sell a 144 LED/m strip which might offer smoother color transitions, you will need to modify the code + verify that your power source can handle
- Tinfoil
- Mousepad (Razer Goliathus Mobile Stealth Edition)
- Microcontroller (see my microcontroller project)
- 3 Pin JST SM Connector (Optional)

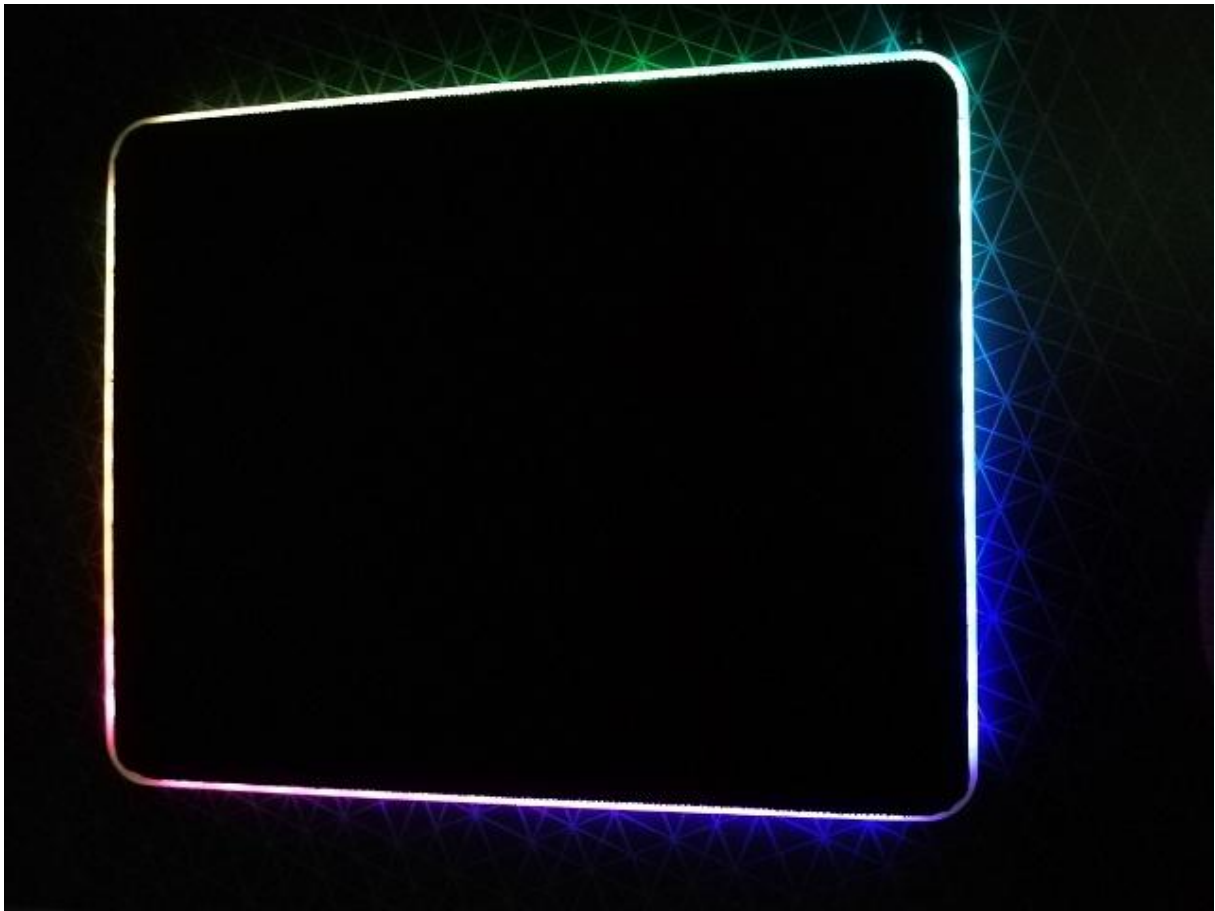
Post-Printing











Category: Computer

Model files



mouse_pad_base_left.stl



mouse_pad_base_right.stl

Other files



fastled_state_interrupt.txt

[Find source .stl files on Thingiverse.com](#)

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