

Moonlamp Base with WS2812B and Arduino Nano



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Summary

This is a base for a small to medium moonlamp. <https://www.thingiverse.com/thing:2955930> It holds an Arduino Nano 3.0...

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Tags: [ws2812b](#) [arduinonano](#) [thingiverse](#) [moonlamp](#)

This is a base for a small to medium moonlamp. <https://www.thingiverse.com/thing:2955930>

It holds an Arduino Nano 3.0 and a WS2812B 5x5mm LED module for illumination.

A simple arduino-sketch is attached which is just a slightly modified version of the Adafruit Neopixel strandtest. Be aware it is using a RGBW LED module. If using RGB only, please modify accordingly.

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UPDATE as of Dec 23 2019:

I added a second sketch called WS2812B_moonlamp_EEPROM.ino. With this sketch, you have 10 different modes:

1 White

2 Yellow-Orange

3 Red

4 Green

5 Blue

6 Yellow

7 Magenta

8 Cyan

9 Rainbow (repeat permanent)

10 White 7.5s - Rainbow - Yellow 7.5s - Rainbow (repeat 10)

On boot, light show 2 seconds blue, 2 seconds red then number of white blinks indicate mode as described above.

Powercycle increases modenumber. If modenumber was 10, an increase leads to mode 1

Power on and power off at first blue light decreases modenumber. If mode was, a decrease leads to mode 10.

Power on and power off at first red light resets mode to 1 (white).

This sketch uses inbuilt EEPROM of Atmega328P.

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Use two M3x10 screws to securely attach the cap to the base. Secure LED-module in place with a drop of superglue or a tape.

OpenSCAD file attached for easy modification.

Enjoy!

Strandtest original: https://github.com/adafruit/Adafruit_NeoPixel/blob/master/examples/strandtest/strandtest.ino

LED module used:

<https://www.aliexpress.com/item/Newest-WS2812B-WS2811-WS2812-built-in-SMD-5050-Led-pixel-module-PCB-Addressable-RGB-modules-Strip/1897830725.html?spm=a2g0s.9042311.0.0.27424c4dOOhDIw>

Arduino Nano V3 used

<https://www.aliexpress.com/item/Free-Shipping-for-Arduino-Nano-V3-0-controller-ATMEGA328P-ATMEGA328-original-CH340-USB-cable/32607801066.html?spm=a2g0s.9042311.0.0.2d874c4dEPEKKu>

Print Settings

Printer Brand:

Creality

Printer:

Ender 3

Rafts:

No

Supports:

No

Resolution:

0.2

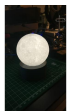
Infill:

20%

Filament: Noyes PLA silver

Category: Decor

This remix is based on



Moonlamp Base with WS2812B and Arduino Nano

by Arminth

Model files



moonlamp_stand.scad



base.stl



cap.stl



base_cap.stl

Other files



ws2812b_moonlamp.ino



ws2812b_moonlamp_eeprom.ino

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

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