



Spiral Square LED Lamp



wedgeworks

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Summary

A beautiful spiraling square LED lamp using WLED and ESP32 DevKit Controller.

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Tags: [lamp](#) [led](#) [spiral](#) [esp32](#) [wled](#) [square](#)

A really cool lamp that's a little bit of a challenge to get right but if you do, you'll be very happy with the results.

The Lamp Shade and LED Core needed a brim to ensure first-time success.

The Base is a 3MF so you don't have to mess with painting the supports (use "for support enforcers only" or your Slicer's equivalent.)

The Base Bottom and Top Cap obviously don't need supports.

There are a lot of thoughts on getting a nice clear PETG print like slowing it down, printing a little hotter, 103% flow, part cooling fan off and 100% or 0% infill. You may want to experiment with the Top Cap for your personal preferences. The photos I've uploaded used all of the above and 100% infill or maxing the perimeters for the same effect. I REALLY like how it turned out.

Now for the Hard Part:

Using the ESP32 DevKit project controller and WLED I programmed the lights to go through all kinds of presets. As in 20+. I used a barrel connector for a 5V power supply, a 5V Noctua fan (30 high power LEDs generate a decent amount of heat) and a barrel form factor button to cycle through presets.

It's a bit daunting if you've never used WLED before but there are tens of videos on University of YouTube. Even then, you may run into a few issues. If you need help, shoot a comment below and I'll do what I can.

You can also go the commercial off the shelf route and just shove what you get from Amazon in the base and call it a day.

I had a blast with this one. I hope you do, too!

This remix is based on



Spiral Lamp with RGB LEDs

by TautologicalRecursion

Model files



lamp_shade.stl



shade-base-fan-mod.3mf



top_cap.stl



led-core-ventedf.stl



bottom-for-fan-mod-88x90-interior.stl



base_plate.stl

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