

LED Clock DCF77

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[VIEW IN BROWSER](#)

updated 12. 4. 2022 | published 10. 7. 2021

Summary

A visualization for the DCF77 signal using 2 WS2812 / Neopixel LED Rings (60 and 24 LEDs).

[Hobby & Makers](#) > [Electronics](#)

Tags: [led](#) [clock](#) [gadget](#) [arduino](#) [leds](#) [esp8266](#) [watch](#)
[esp32](#) [wemosd1mini](#) [wemosd1](#) [wallmounted](#) [wallclock](#)
[dcf77](#)

LED Clock (DCF77)

A visualization for the DCF77 signal using 2 WS2812 / Neopixel LED Rings (60 and 24 LEDs). The DCF77 Signal is received via a Websocket Stream, but you can adopt it to use a real DCF77 Receiver Module.

The intention is not to simply show the current time, but to show the single (bit) signals of the DCF77 signal.

Find more Information about [DCF77 at Wikipedia](#).

[Source Code and more Information / GitHub](#)
[YouTube Video](#)

3D Printed Parts

I printed the 3D Parts with PETG (white for the diffuser/shader), and whatever color you prefer for the case and the stands. I printed all parts with a 0.6mm Nozzle (@0.3mm Layer Height) - but also added a 0.4mm Version (= 2 Layers @0.2mm Layer Height) for 0.4mm Nozzles.

The Electronics-Box needs some support, the other parts are fine without any support.

Needed Parts

- 60 LED Ring (WS2812 / Neopixel)
- 24 LED Ring (WS2812 / Neopixel)
- ESP8266 (I used a Wemos D1 mini) or ESP32
- some cables to solder the LEDs and the Microcontroller together
- a little bit of Hot Glue to hold the LED Rings in place (the moulds are slightly larger)

Print Settings

Printer Brand:

Prusa

Printer:

I3 MK3S

Rafts:

No

Supports:

No

Filament:

PolyMaker PETG/PLA

Notes:

Use white Filament for the Shader / Diffuser, needs Support for the Electronics-Box.

Category: Gadgets

Model files



clock_desk_stand.stl

☐ a minimalistic desk-stand



clock_shader_04mm.stl

☐ Front Cover / Shader with 0.4mm thickness



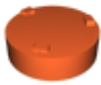
clock_led_holder.stl

☐ Holder for the LED Rings



clock_shader_06mm.stl

☐ Front Cover / Shader with 0.6mm thickness



electronics_box.stl

☐ Case for Electronics (ESP8266 / ESP32)



electronics_box_cap.stl

☐ Cap for the Electronics Box

[Find source .stl files on Thingiverse.com](https://www.thingiverse.com)

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