



## NeoPixel Bike Light



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### Summary

<https://www.youtube.com/watch?v=l0AmRR9w0nw> Build a sci-fi inspired bike light using Adafruit Feather and NeoPixels.

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Tags: [light](#) [led](#) [bike](#) [neopixel](#) [ledlight](#) [headlight](#)

Build a sci-fi inspired bike light using Adafruit Feather and NeoPixels. Use an RGB LED Button to cycle through different colors and animations. The button will actually match the colors of the NeoPixels! The headlight fixture was inspired by rocket boosters and jet engines. I had the idea of an illuminated edge band that wraps around a cylinder with an illuminated inner core. By combining black PLA and translucent PLA, you can mask out certain geometry while illuminating other elements. I've been meaning to design specifically for dual extrusion such as the Ultimaker 3 and this is what I came up with.

Code, Build Instructions, and Source Files:  
<https://learn.adafruit.com/neopixel-headlight/>

Adafruit Feather M4 Express  
<https://www.adafruit.com/product/3857>

24 NeoPixel Ring  
<https://www.adafruit.com/product/1586>

7 NeoPixel Jewel

<https://www.adafruit.com/product/2226>

2200mAh 3.7V Battery

<https://www.adafruit.com/product/1781>

Toggle Switch

<https://www.adafruit.com/product/3221>

RGB LED Metal Button

<https://www.adafruit.com/product/3350>

3D Parts Library on GitHub

[https://github.com/adafruit/Adafruit\\\_CAD\\\_Parts](https://github.com/adafruit/Adafruit\_CAD\_Parts)

## Print instructions

Unassociated tags: adafruit feather

Licence: Creative Commons - Attribution Category: DIY

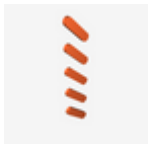
## Model files



**bhl-box-clip.stl**



**bhl-cover-usb.stl**



**bhl-box-b.stl**



**bhl-plate-clip.stl**



**neopixel\_headlight.f3d**



**bhl-headlight-b.stl**

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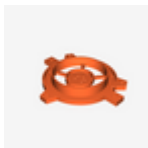
**neopixel\_headlight.step**

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**bhl-cover-jst.stl**

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**bhl-plate.stl**

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**bhl-box-a.stl**

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**bhl-feather-mount.stl**

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**bhl-headlight-a.stl**

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

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