



## The Lightbox, an ender 3 neo hot end cover with LED



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### Summary

Adds space around the nozzle to illuminate it, as well as increased viewing angles.

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Features:

- 3 angled strips for attaching LED strips to
- Increased front viewing angle towards the nozzle

You can use any lighting solution you like, or one that you do not like.

A standard 24v cool white (5000k+) LED strip is ideal.

Make sure you use silicon wires, not PVC coated. If a PVC coated wire rests against a hot part it might melt, short out, and kill your printer.

It should screw together without the need for brass inserts using the original printer's hardware and fan. If your print does not I'd suggest drilling out the holes a little and using an insert anyway.

3 versions of the model are available, named for the difficulty of printing them. If your printer is not dialed in well go with the simple version.

For the semi complex and complex I would suggest a slow travelspeed. The triangles have a tendency to warp upwards which the nozzle may impact on the next layer. A travelspeed of 30 or less makes the nozzle melt through the lip, ironing it, rather than push against the entire model potentially causing a failed print.

Print face down and include the support.stl on the long bridge on the side. Rough align on the XY is fine, but input Z as 14.8 and make sure you turn off "drop down model" in your slicer. Refer to final picture.

No other supports should be necessary.

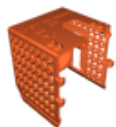
Update 09-10-2023

V2.2, changed the grill next to the screw a bit. It proved to be a weak point with repeated instal/removal. Should be stronger now.

## Model files



**cover-complex-22.obj**



**cover-semi-complex-22.obj**



**cover-simple-22.obj**



**cover\_support.stl**

[Find source .stl files on Thingiverse.com](https://www.thingiverse.com/thing/1111111)

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