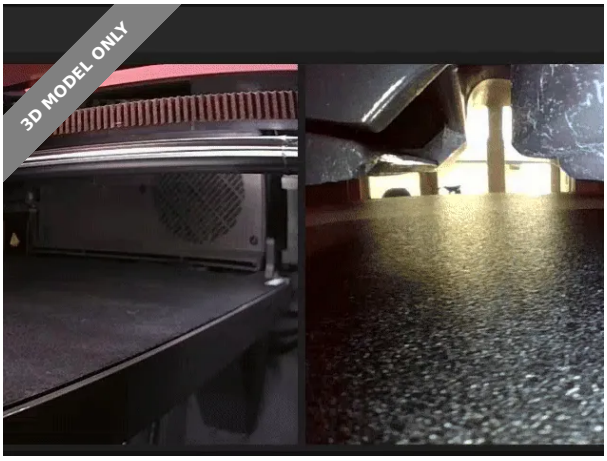



# Elegoo Centauri Carbon - Nozzle Camera

**Ishypora**

VIEW IN BROWSER

updated 30. 10. 2026 | published 30. 10. 2026

## Summary

A nozzle camera for the Elegoo Centauri Carbon.

3D Printers > Other Printer Parts & Upgrades

Tags: camera supportless nozzle nozzlecamera elegoo supportfree nozzlecam centauri centauricarbon centauricarbonupgrade centauricarbon2

Saw this post on Reddit a while back and thought I would have a go at doing something similar: https://www.reddit.com/r/elegoo/comments/1sqa4gh/centauri_carbon_nozzle_cam_raw_double_mjpeg_video/

I created the model from the OpenCentauri CAD model: https://github.com/OpenCentauri/cad

Camera:

- I highly suggest using a camera with a OV9734 sensor, this gives true 720p via MJPEG (not YUYV) and has a really short focal length.
    - This is the specific model I used:
        - 3.3mm soft cable - https://www.aliexpress.com/item/1005012733598208.html?spm=a2g0o.order_list.order_list_main.59.33ec1802Ona0DP
            - The 5.5mm+ models do **NOT** use the OV9734 sensor

Cable routing:

- Follow the blue arrows in the pictures.
- If you go with a camera with a LED dimmer built into the cable, like the one I suggest above, then you'll need to route the cable from the bottom up as the dimmer won't fit through the hole into the base.
- The other usb going into the RPi is an adapter cable I made for the factory chamber camera because I wanted to have it running at 720p.
- Modelled a small cutout for the cable tie to fit.

Raspberry Pi:

- I used a 4b as I had one spare, but I believe a Zero 2W would be sufficient if using MJPEG passthrough/hardware offload.
- The case I used is:
    - https://www.printables.com/model/106225-modular-snap-together-raspberry-pi-2b3b3b4-case-w-

Buck Converter:

- The buck converter takes the 24v from the printer PSU and steps it down to the 5v the RPi needs.
- I used this one as it give ~5.2v at 6A:
    - https://www.aliexpress.com/item/1005007715701799.html?spm=a2g0o.order_list.order_list_main.190.33ec1802Ona0DP

Software:

- I went with uStreamer, and it seems to be quite stable. uStreamer is what the COSMOS firmware uses with the stock webcam.
- Setting the stream in the Mainsail interface on the COSMOS firmware.

I have included STEP file, but I'd be happy to make updates if needed. I've tried to make the model support-free, particularly the bolt holes.

Printed in ASA, 0.4mm nozzle with 0.2mm layer height.

Edit 31-Oct-2026: Just checked the CC2 CAD model, and this toolhead back cover should be compatible with the CC2.

# Model files



**elegoo-centauri-carbon-nozzle-camera.step**



**elegoo-centauri-carbon-nozzle-camera.stl**



**buck-converter-case.step**



**buck-converter-case.stl**

# License

This work is licensed under a
Creative Commons (4.0 International License)

**Attribution**

✖ | Sharing without ATTRIBUTION
✔ | Remix Culture allowed
✔ | Commercial Use
✔ | Free Cultural Works
✔ | Meets Open Definition